

Fundamentals of Agri Business Management

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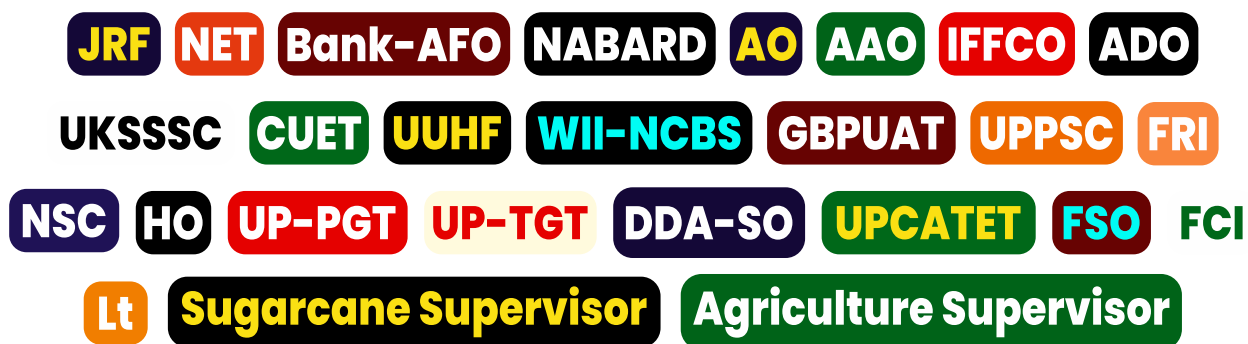
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AECO 341 - FUNDAMENTALS OF AGRI BUSINESS MANAGEMENT (1+1)

1. AGRIBUSINESS
2. SMALL BUSINESS
3. MANAGEMENT
4. PLANNING
5. ORGANIZING
6. DIRECTING
7. CONTROLLING
8. PRODUCTION MANAGEMENT
9. MATERIALS MANAGEMENT
10. MARKETING MANAGEMENT
11. PERSONNEL MANAGEMENT
12. FINANCIAL MANAGEMENT
13. MANAGEMENT INFORMATION SYSTEM
14. GOVERNMENT PROGRAMMES AND REGULATIONS FOR AGRIBUSINESS
15. AGRICULTURAL INPUTS AND AGRO-PROCESSING



1. AGRIBUSINESS

John H. Davis of Harvard University first used the term agribusiness in 1955. In 1980s it was given three connotations: (1) synonymous with term agriculture, (2) synonymous with agricultural economics and (3) a modified concept of agriculture, excluding farming, or the off-farm aspects of agriculture.

At present, agribusiness is defined as all business enterprises or sells to farmers / traders / consumers. The transaction may involve either an input or a produce or service and encompasses items such as:

- 1) Productive resources (feed, seed, fertilizer, equipment, energy, pesticides, machinery, etc.)
- 2) Agricultural commodities -(raw and processed commodities of food and fiber)
- 3) Facilitative services (credit, insurance, marketing, storage, processing, transportation, packing, distribution, consultancy, soil testing etc.).

Scope for Agribusiness in India

1. India is endowed with varied ago-climate, which facilitates production of temperate, sub-tropical and tropical agricultural commodities.
2. There is growing demand for agricultural inputs like feed and fodder, inorganic fertilizers, bio-fertilizers.
3. Biotechnology applications in agriculture have vast scope in production of seed, bio-control agents, industrial harnessing of microbes for bakery products.
4. Export can be harnessed as a source of economic growth. As a signatory of World Trade Organization, India has vast potential to improve its present position in the World trade of agricultural commodities both raw and processed form. The products line include cereals, pulses, oilseeds and oils, oil meal, spices and condiments, fruits and vegetables, flowers, medicinal plants and essential oils, agricultural advisory services, agricultural tools and implements, meat, milk and milk products, fish and fish products, ornamental fish, forest by products etc.
5. At present processing is done at primary level only and the rising standard of living expands opportunities for secondary and tertiary processing of agricultural commodities.
6. The vast coastal line and internal water courses provides enormous opportunity for production of marine and inland fish and ornamental fish culture gaining popularity with increase in aesthetic value among the citizens of India..
7. The livestock wealth gives enormous scope for production of meat, milk and milk products, poultry products etc
8. The forest resources can be utilized for production of by products of forestry.
9. Beekeeping and apiary can be taken up on large scale in India.
10. Mushroom production for domestic consumption and export can be enhanced with improvement in the state of art of their production.
11. Organic farming has highest potential in India as the pesticide and inorganic fertilizer application are less in India compared to industrial nations of the world. The farmers can be encouraged and educated to switch over for organic farming.
12. There is wide scope for production and promotion of bio-pesticides and bio-control agents for protection of crops.
13. Seeds, hybrid and genetically modified crops, have the highest potential in India in the future, since the productivity of high yielding varieties have reached a plateau.
14. Micro-irrigation systems and labor saving farm equipments have good potential for the years to come due to declining groundwater level and labor scarcity for agricultural operations like weeding, transplanting and harvesting.
15. Production of vegetables and flowers under green house conditions can be taken up to harness the export market.
16. Trained human resources in agriculture and allied sciences will take on agricultural extension system due to dwindling resources of state finance and down sizing the present government agricultural extension staff as consulting services.

17. The enhanced agricultural production throws open opportunities for employment in marketing, transport, cold storage and warehousing facilities, credit, insurance and logistic support services.

Types of Small Businesses

With the exception of Government, most of the small businesses can be classified as the following types

- 1) Production
- 2) Retailing
- 3) Distribution
- 4) Personal services
- 5) Professional services
- 6) Financial
- 7) Franchising

1. Production: This classification includes all types of production including agricultural production of crops and livestock, as well as forestry.

2. Distribution: This classification refers to those businesses, which do not make anything but which bring the goods and services to the consumer or user. This includes such activities as packaging, labeling, transporting, refrigerating, freezing, processing, storing, and performing any service necessary to prepare the goods or to provide the service to eventual consumer.

3. Retailing: Although often included as a phase of distribution, retailing is listed as a separate category because there are a large number of persons employed in retailing. Obviously it represents one of the best opportunities for the potential entrepreneur. Retailing is that stage of distribution, which deals with the consumers. Examples of retailers are grocers, self-service stores, florists, agricultural input retailing.

4. Personal services: The service business is those, which do not primarily supply goods to the public, but instead perform a service. Goods may be used to perform the service but they are of secondary importance. Examples of personal service are hotels, restaurants, agro-service centers.

5. Professional services: Some type of services, in order to protect the public, requires considerable training on the part of those offering the service. Usually that professional services must have a formal education and rigid examinations before receiving licenses to offer their services to the public. Examples of those offering services are investment brokers, insurance agents etc.

6. Financial: Financial businesses are usually service-oriented but since they deal primarily with the loaning or investing of money or the equivalents of money (stocks, bonds, property rights, etc) a separate category describes them best. Examples of financial services are commercial banks, insurance companies, thrift and loan societies etc.

7. Franchising: Franchising is a system for selectively distributing goods or services through outlets owned by the franchisee. Basically, a franchise is a patent or trademark, license, entitling the holder to market particular products or services under a brand name or trademark according to prearranged terms and conditions. The franchiser is the owner of his or her own business(the franchisee) is likely to be more diligent and strive harder for success than the hired manager of a company-owned outlet. Since franchising is form of selective distribution, the typical franchise agreement prohibits the franchisee from setting up competing outlets within the franchise area. Examples of franchise services are diet services, quick-service food-drive inns like fried chicken.

Forms of the Business Organizations

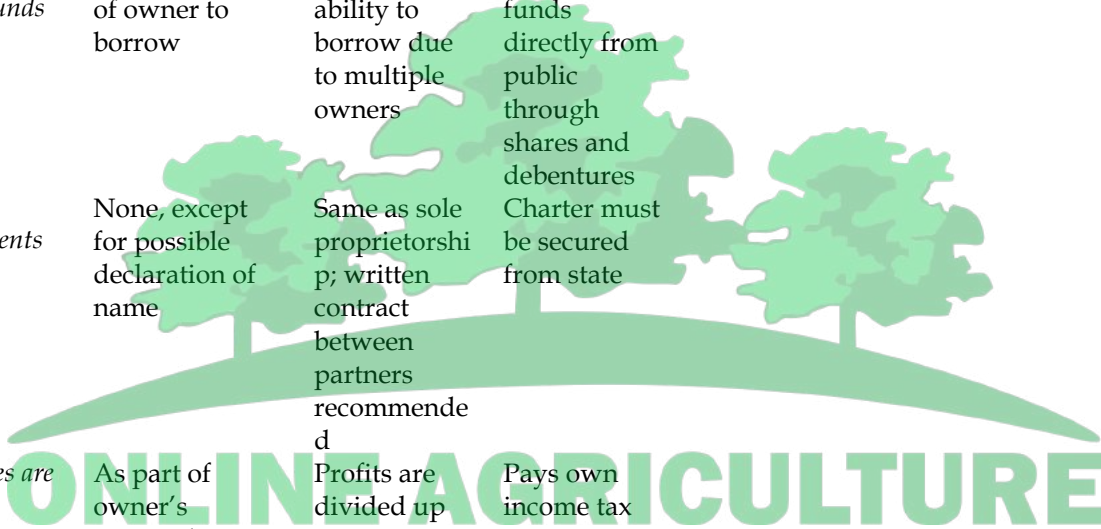
There are three basic forms of business organization methods: the sole proprietorship, the partnership, and the corporation. With only a few limited exceptions, any type of business venture can use any form of business organization. The factors that will affect the business form chosen are:

1. Ease of formation
2. Exposure to financial risk
3. Ability to raise capital
4. Tax treatment of income
5. Continuity of business upon the death of owner.



A comparison of the three forms of Business organization

| FACTORS | SOLE PROPRIETORSHIP | PARTNERSHIP | CORPORATION |
|---------------------------------|---|---|--|
| <i>Number of owners</i> | One | Two or more | One or more |
| <i>Ease of formation</i> | Very easy | Easy to very easy | Moderate to easy |
| <i>Degree of financial risk</i> | Owner is responsible for all debts | Partners share responsibility for debts | Owners have only limited responsibility for debts in name of company |
| <i>Ability to borrow funds</i> | Limited ability of owner to borrow | Improved ability to borrow due to multiple owners | Can borrow funds directly from public through shares and debentures |
| <i>Legal requirements</i> | None, except for possible declaration of name | Same as sole proprietorship; written contract between partners recommended | Charter must be secured from state |
| <i>How taxes are handled</i> | As part of owner's personal tax return | Profits are divided up among owners and are taxed on each partner's tax return | Pays own income tax |
| <i>Continuity of business</i> | Business is terminated at death of owner | Business may be terminated at death of any partner, unless provisions for continuation are made | Business continues after death of any stockholder |



Entrepreneur

Many economic theories emphasize the significant role played by individual entrepreneurs as they combine talents, abilities and drive to transform resources into profitable undertakings. Joseph Schumpeter, was the first major writer to highlight the human agent in the process of economic development. He believed that the economy was propelled by the activities of persons who wanted to promote new goods and new methods of productions or to exploit a new source of materials or new market not merely for profit but also for the purpose of creating.

Likewise, Arthur W. Lewis contended that economic growth was bound to be slow unless there was an adequate supply of entrepreneurs looking out for new ideas, and willing to take the risk of introducing them.

The relation between self –sustained growth of an economy and entrepreneurship was further discussed by W.W. Rostow when he claimed that,, “ economic growth was the result of an interesting process involving the economic, social and political sectors of society, including emergence of corps of entrepreneurs who are psychologically motivated and technologically prepared regularly to lead the way in introducing new production functions in the economy” .

As it is, experts as have variously described the entrepreneur

- A person who innovates
- One who allocates and manages the factors of production and bears risk
- One who has ability to perceive latent economic opportunities and devise their exploitation
- An individual who conceives the ideas of business, design the organization of firms, accumulates capital, recruits labour, establishes relations with supplier, customers and the government and converts the conception into a functional organization.
- The supplier of resources, supervisor and coordinator and ultimate decision maker.

The Importance of Personality in Business

One of the most important assets of any business owner is a personality, which lends itself to the type of business chosen. There are many different kinds of business and innumerable types of personalities. An objective self-examination is therefore necessary for the discovery of personal strengths and weaknesses, especially as they relate to owning a particular type of business. In assessing one’s own personality, the following inventory should prove helpful. Potential business owners should question themselves on each of these items, noting those areas where improvement is most needed.

A. Physical Qualities

1. Appearance
2. General health
3. Endurance
4. Vision
5. Hearing

B. Mental Abilities

1. General intelligence
2. Knowledge of business
3. Speed of reaction
4. Memory
5. Creativeness
6. Initiative
7. Insight into character

C. Ethics

1. Honesty
2. Loyalty
3. Dependability
4. Perseverance

D .Social Qualities

1. Courtesy

2. Sympathy
3. Ability to work with others
4. Cheerfulness
5. Self-confidence
6. Adaptability
7. Enthusiasm

E. Executive Qualities

1. Ability to direct others
2. Ability to organize
3. Ability to make decisions
4. Ability to take responsibility
5. Ability to accept suggestions

Entrepreneurial Competencies

A competency is an underlying characteristic of a person, which results in effective and / or superior performance in a job. Competence is an underlying characteristic of a person, in that it may be motive/traits/skills or aspect of one's self-image or a body of knowledge which one uses. The existence of these characteristics may or may not be known to the person. In this sense, the characteristic may be unconscious aspect of the person. In simple terms a competence is a combination of a body of knowledge, skills and cluster of appropriate motives / traits and motives that an individual possesses to perform a given task effectively and efficiently. The fifteen identified entrepreneurial competencies are furnished below.

1. Initiative

Takes action that go beyond job requirements or the demand of the situation.

- Does things before being asked or forced to by events
- Acts to extend the business to new areas, products or services.

2. Seeing and acting on opportunities

Looks for and takes action on opportunities

- Sees and acts on opportunities (Business, educational or personal growth)
- Seizes unusual opportunities to obtain financing equipment, land work, space, or assistance.

3. Persistence

- Takes repeated or different actions to overcome obstacle
- Takes action in the face of a significant obstacle

4. Information seeking

Takes action on own to get information to help reach objectives or clarify problems.

- Does personal research on how to provide a product or service
- Seeks information or asks questions to clarify what is wanted or needed
- Personally undertakes research, analysis or
- investigation
- Uses contacts or information networks to obtain useful information

5. Concern for high quality of work

Acts to do things that meet or beat existing standards of excellence

- States a desire to produce work of high quality
- Compares own work or own company's work favourably to that of others.

6. Commitment to work contract

Places the highest priority or getting a job completed

- Makes a personal sacrifice or expands extraordinary effort to complete a job
- Accepts full responsibility for problems in completing a job for others
- Pitches in with workers or works in their place to get the job done
- Expresses a concern for satisfying the customer

7. Efficiency orientation

Finds ways to do things faster or with few resources or at a lower cost.

- Looks for or finds ways to do things faster or at less cost
- Uses information or business tools to improve efficiency

8. Systematic planning

Develops and uses the logical, step-by-step plans to reach goals

- Plans by breaking a large task down into sub-tasks
- Develops plans that anticipate obstacles
- Evaluates alternatives
- Takes a logical and systematic approach to activities

9. Problem solving

Identifies new and potentially unique ideas to reach goals

- Identify an alternative strategy to reach a goal
- Generate new ideas or innovative to reach a goal

10. Self-confidence

Has a strong belief in self and own abilities

- Express confidence in own ability to complete a task or meet a challenge
- Sticks with own judgment in the face of opposition or early lack of success
- Does something that he says is risky

11. Assertiveness

Confronts problems and issues with others directly

- Tells others what they have to do
- Reprimands or disciplines those failing to perform as expected

12. Persuasion

Successfully persuades others

- Convinces someone to buy a product or service
- Convinces someone to provide financing
- Convinces someone to do something else that would like that person to do
- Asserts own competence, reliability or other personal or company's qualities
- Asserts strong confidence in own company's or organization's products or services

13. Use of influence strategies

- Acts to develop business contacts
- Uses influential people as agents to accomplish own objectives
- Selectively limits the information given to others
- Uses a strategy or influence or persuade others

14. Monitoring

- Develops or uses procedures to ensure that work is completed or that work gets standards or quality
- Personally supervises all aspects of a project

15. Concern for relevant others welfare

- Takes action to improve the welfare of employees
- Takes positive action in response to employees personal concerns
- Expresses concern about the welfare of employees.





2. SMALL BUSINESS

Small Scale Industry in the Indian Economy Development

Small businesses / small-scale industrial units are playing an important role in the economic development of any nation. Although it is not generally recognized, this segment of our economy includes some of the dynamic, profitable and interesting firms. In India, there are 32.25 lakhs small-scale industrial units / businesses in the SSI sector, employing 177.30 lakh persons (1999-2000). The output of this sector is around Rs.5, 78,470 crores. The export amounted to Rs.53, 975 crores. SSIs contribute up to 40 per cent of gross turnover in manufacturing sector, 45% of the manufacturing exports and 35% of the total exports. SSI sector, contributes 7% of the GDP. During this era of economic liberalization, the growth of the SSI sector is rather quite perceptible.

Definition of Small Scale Industry

There is no generally accepted definition of a 'small business'. The definitions vary all the way from country to country and Government-to-Government in a country. The following are some of the definitions.

In the USA, in the Small Business Act 1953, congress defined a small business as one that is independently owned and operated and which is not dominant in its field of operation.

In India, the Department of Small Scale and Agro and Rural Industries considered small businesses as a sector and given the following definitions.

1. Small Scale Industrial Undertaking

An industrial undertaking in which the investment in fixed assets in Plant and Machinery, whether held in ownership terms or on lease or by hire purchase, does not exceed Rs.100 lakhs is called a Small Scale Industrial Undertaking.

2. Ancillary Industrial Undertaking

An industrial undertaking which is engaged or proposed to be engaged in the manufacture or production of parts, components, sub-assemblies, tooling or intermediates or the rendering of services and the undertaking supplies or renders or proposes to supply or render not less than 50% of its production or services as the case may be to one or more other industrial undertakings and whose investment in fixed assets in Plant and Machinery, whether held on ownership terms or on lease or on by hire purchase does not exceed Rs.100 lakhs is called an Ancillary Industrial Undertaking.

3. Tiny Enterprises

All small-scale units with investment limit in Plant and Machinery up to Rs.25 lakhs irrespective of the location of the unit are called tiny enterprises.

4. Export Oriented Units

Units having fixed assets in Plant and Machinery not exceeding Rs.100 lakhs and which undertake to export at least 30% of its current production by the end of 3rd year from the date of its commencing of production are called Export Oriented Units (EOU).

5. Small Scale (Industrial related) Service and Business Enterprises (SSSBE)

Industry related Service and Business Enterprises with investment up to Rs.5 lakhs in fixed assets excluding Land and Building are called Small scale (Industry related) Service and Business Enterprises (SSSBE).

6. Women Enterprises

Women enterprises are those small-scale units, where one or more women entrepreneurs have not less than 51% of financial holding. Such units are given more concessions and encouragement.

7. Village and Small Scale Industries (24.12.1999)



Objectives of A Small Business

Objectives are the ends towards which all the activities of the organization are directed.

1. Service
2. Profit
3. Community participation
4. Growth
5. Subsidiaries

Characteristics

The above definitions exhibit the following characteristics associated with small business and small-scale units.

1. Characterized by smallness
2. Involves lesser capital
3. Mostly one man venture
4. They are highly diversified - wide range of products
5. Wide dispersal geographically

Importance

There are a number of reasons why smaller firms are of importance to our economy.

1. They are the important sources of competition and challenge the economic power of larger firms
2. They broaden the distribution of economic and political power and does not result in concentration of power
3. They are the sources of innovation and creativity
4. They offer career opportunities to those, who are happiest and most productive in the unstructured environment of a small company
5. Provide the dynamism, innovation and effectiveness that lead to the productive economic system
6. There exists vast agribusiness opportunities in developing economy of India
7. Generating employment with minimum investment
8. Promoting export
9. Control over production widely distributed
10. Develop risk takers

Advantages

1. Less capital outlay but more employment generation
2. Does not require sophisticated technology
3. Facilitates decentralization and dispersal of business units
4. They offer a wide range of choices to consumers
5. Can serve specialized needs
6. Utilizes the resources in full without wastage

Disadvantages

1. Inadequate management ability
2. Inadequate finance
3. Poor competitive position
4. Uncertain business continuity

Growth Stages

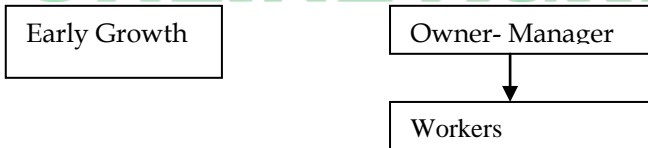
Following are the various growth stages of any small business units.

- 1. First stage:** One person operation - Where owner does all

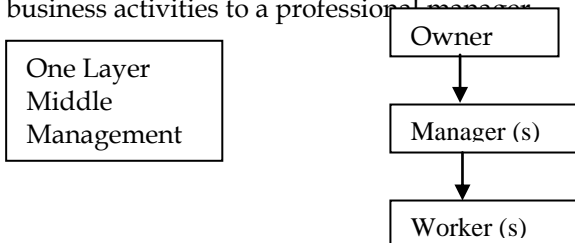
The activities



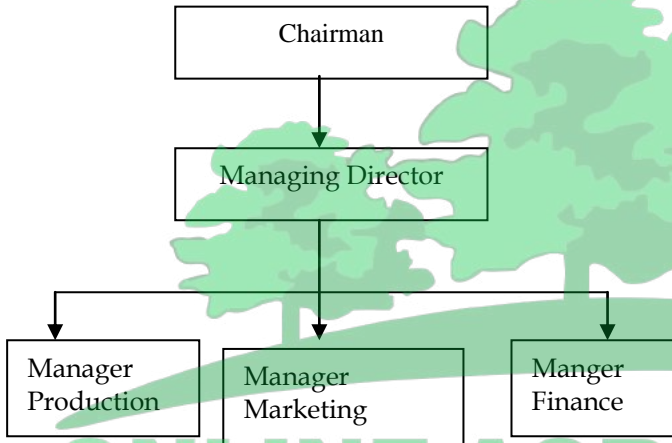
- 2. Second stage: Separation** of management and non-management functions hired subordinates to do some of the manual and / or mental activities while owner manages



- 3. Third stage** Separation of ownership and management functions; owner begins to relinquish the responsibilities for the day-to-day running of the business activities to a professional manager



4. Multi-layer management



Organization and Administration

Organizational structure and administration for promotion of SSI in India are outlined below:

At national level, under Ministry of Industry an exclusive Department of Small Scale & Agro and Rural industries exists since 1991 for the promotion and development of small-scale industries. The Office of Development Commissioner (Small Scale Industries) has been functioning within the Ministry of Industry since 1954 as an apex / nodal organ and provides link between the Ministry / Department and field organizations. Since 1991 it has been working as an attached office to the Department of Small Scale & Agro and Rural Industries.

Development Commissioner (Small Scale Industries)

The Small Industries Development Organization (SIDO) headed by the Additional

Secretary & Development Commissioner (SSI), being an apex body for formulating policies for the development of small-scale industries in the country is playing a very constructive role for strengthening this vital sector. It functions through a network of SISIs, Branch SISIs, Regional Testing Centres, Footwear Training Centres, Production Centre, Field Testing Stations and specialized institutes. It renders services such as:

- Advising the Government in policy formulation for the promotion and development of small-scale industries.
- Providing techno-economic and managerial consultancy, common facilities and extension services to small scale units
- Providing facilities for technology upgradation, modernization, quality improvement and infrastructure.
- Human Resource Development through training and skill up gradation.
- Providing economic information services.
- Maintaining a close liaison with the Central Ministries, Planning Commission, State Governments, Financial Institutions and other organizations concerned with development of Small Scale Industries.
- Evolving and Coordinating Policies and Programmes for development of Small Scale Industries as ancillaries to large and medium scale industries.
- Monitoring of PMRY Scheme.

Over the years SIDO has served a very useful purpose as a catalyst of growth of small enterprises through its vast network of field organizations spread over different parts of the country.

SSI Board

The range of development work in Small Scale Industries involves several Department / Ministries and several organizations of Central / State Governments. To facilitate coordination and inter-institutional linkage, the Small Industries Board has been constituted. It is an apex advisory body constituted to render advice to the Government on all issues pertaining to the small-scale sector. The Industry Minister of the Government of India is the Chairman and the Board comprises among others State Industry Ministers, some Members of Parliament, and Secretaries of various Departments of Government of India, financial institutions, public sector undertakings, industry associations and eminent experts in the field. The Board was last constituted on 26.9.1998 with 93 members besides the Chairman. The term of the Board is for two years.

Small Industries Service Institutes (SISIs)

There are 28 SISIs and 30 Branch SISIs set up in State capitals and other industrial cities all over the country. The main activities of these institutions are as follows:

- Assistance / Consultancy to Prospective Entrepreneurs
- Assistance / Consultancy rendered to existing units
- Preparation of State Industries Profiles
- Preparation / Updating of District Industrial Potential Surveys
- Project Profiles
- Entrepreneurship Development Programmes
- Motivational Campaigns
- Production Index

- 
- Management Development Programmes
 - Skill Development Programmes
 - Energy Conservation
 - Pollution Control
 - Quality Control & Up gradation
 - Export Promotion
 - Ancillary Development
 - Common Facility Workshop / Lab
 - Preparation of Directory of Specific Industry
 - Intensive Technical Assistance
 - Coordination with DICs
 - Linkage with State Govt. Functionaries
 - Market Surveys
 - Other Action Plan Activities assigned by Headquarters

SISIs and its Branches have common facility workshops in various trades. There is at present 42 such common facility workshops attached to SISIs / Branch SISIs.

Some Current Problems Worrying Small

Businessmen

1. Govt.regulation/ policy in general
2. Inflation
3. Taxes
4. Govt. paper works
5. Labour unions
6. High interest rates
7. Environmental restrictions
8. Lack of required capital
9. Minimum Wage Laws
10. Corruptive and bureaucratic officialdom
11. Seasonality in agricultural production and interruptions in raw materials availability
12. Seasonality in demand for agricultural inputs

13. Lack of appropriate technology

Business Failure May Result From One or More of the Following Weakness

1. Lack of business records
2. Lack of business experience
3. Insufficient stock-turnover
4. Uncollected Accounts receivables
5. Inventory shrinkage
6. Poor inventory control
7. Lack of finance
8. Improper mark-up
9. Lack of sales
10. Too much left to chance
11. Crucial obstacles go un-noticed through ignorance.

ONLINE AGRICULTURE

ENTREPRENERIAL OPPORTUNITIES IN
MODERN AGRICULTURE

| FARMING (ON FARM) | PRODUCT MARKETING | INPUTS MARKETI NG | PROCES SING | FACILIT ATIVE |
|--------------------------|-----------------------|-----------------------------|------------------|----------------------|
| 1. Crop | 1.Wholesale | 1.Fertilizer | 1.Milk | 1.R & D |
| 2.Dairy/Poultry /Goat | 2.retail | 2. Agrl. Chemicals | 2.Fruits | 2.Mktg.In fo |
| 3.Fish | 3.Commission Agent | 3.Seeds | 3.vegetab les | 3.Quality control |
| 4.Rabbit | 4. Transport | 4. Machinerie s | 4.Paddy | 4.Insuran ce |
| 5.vegetables | 5. Export | 5.Animal feed | 5.Sugarca ne | 5.Energy |
| 6.Flowers | 6.Finance | 6.Poultry hatchery | 6.Cashew | |
| 7.Ornamental plants | 7.Storage | 7.Vetmedic ines | 7.Coir | |
| 8.Palmrosa | 8.Consultancy | 8.Landscap ing | 8.Poultry | |
| 9.Fodder | 8.Consultancy | 9.Agrl.cred it | 9.Cattle | |
| 10.Sericultue | | 10.Custom service | 10.Tanne ry | |
| 11. Agro- forestry | | 11.Bio- control units | 11.Brewe ry | |
| 12. Beekeeping | | 12.Bio-tech units | 12.P. board | |
| 13.Mushroom | | | | |

they are Enterprises, Entrepreneurs and Environment. Already we discussed on the entrepreneurial personality, abilities, motives and competencies. Also we have discussed on the enterprises opportunities and their feasibility and viability, only those enterprises meeting the feasibility and viability will be considered for taking. Next important thing is the environment in which the enterprises and entrepreneurs function.

The environment factors or forces which affect the success of business are into (1) Economic environment, (2) Demographic environment, (3) Socio-cultural environment, (4) Technological environment (5) Political environment, and (6) Legal environment.

Importance of Environment Analysis

The manager needs to be dynamic to effectively deal with the challenges of environment. The environment of business is not static. Some of the following benefits of environment scanning are as follows:

- It creates an increased general awareness of environmental changes on the part of management
- It guides with greater effectiveness in matters relating to Government
- It helps in marketing analysis
- It suggests improvements in diversification and resource allocation
- It helps firms to identify and capitalize upon opportunities rather than losing out to competitors
- It provides a base of objective qualitative information about the business environment that can subsequently be of value in designing the strategies.



3. MANAGEMENT

Management can be viewed as a group effort towards a common goal in which team behaviour plays the important role. According to this view the material resources and external environment are common to all management; what makes for effectiveness and success of one group relative others is management - that is the human element - behaving in group and leading the business to its determined goal.

Management may in short be called a science of decision-making or a science of choice. A farmer has to make judicious decisions on the use of scarce resources, having alternative uses to obtain the maximum profit and family satisfaction on a continuous basis from the farm as a whole. In other words, management seeks to help the farmer in deciding problems like what to produce, how much to produce and when to buy and sell and in organization and managerial problems relating to these decisions.

Management - Definition

According to **Lawrence A. Appley**, management is an art of getting things done through the efforts of other people.

Henri Fayol defined management, as the conduct of affairs of a business, moving its objective through a continuous process of improvement and optimization of resources via the essential management functions. The manager has to forecast and plan, to organize to command, to co-ordinate, and to control the business for attaining its goals.

According to **William Spriegel**, management is that function of an enterprise, which concerns itself with the direction, and control of the various activities to attain business objectives. Management embraces all functions that relate to the initiation of an enterprise - its financing, the establishment of all major policies, the provision of all necessary equipment, the outlining of the general form of organization under which the enterprise is to operate and the selection of the principal officers.

Management is also a mechanism by which a defined human group pursues a determined set of objectives through systematic group efforts for their implementation most effectively and economically. This definition recognizes the role of the human element and of group efforts, places due emphasis on the pre-determination of objectives, wants the management process to be systematic and draws attention to the effective and economic implementation.

Importance of Management

1. **The very success or failure, even the very survival of an enterprise depends on its management. The economy and effectiveness with which managerial functions are performed are an index of its successful operations. It is the management, which provides effectiveness to human efforts.**
2. Management plays an impressive role on the performance of four key tasks, namely, achieving economic performance, creating productive work, managing the social impact and responsibility of a business and managing the time dimension.
3. Joseph Schumpeter, the great economist viewed management and entrepreneurs as the 'engine of growth'.
4. Management is the driving force and shows how best man could make effective utilization of world scarce resources and make a substantial contribution to the progress and well being of a given society.
5. Management while taking cognizance of the changing conditions and providing foresight and imagination is constantly on the run for improvement.
6. Orderliness is the keynote of management and this is the guiding star for the effective and successful performance of trying and difficult endeavours and tasks of managers.

Elements of Management

The basic elements, which are to be necessarily present in all forms of management, are discussed below.

1. There has to be a horizon - a universe, an ambit, within which the management must perform. This ambit may be large or small but it ought to be properly defined.
2. There must be an organization, which gives the institutional structure to management. The human team and material inputs used are constituted in the organizational structure. The organization may be elaborate and complex, or it may be simple.
3. There is a need for planning - planning a decision planning, planning a system, a programme and a way of implementation and its monitoring. Planning is a way of organizing and utilizing resources to attain maximum benefit from an economic activity.
4. Any management must have better staffing which involves both qualitative and quantitative aspects.
5. Management needs leadership and direction, as it involves teamwork. Without proper leadership and direction, the cannot be reached.
6. There is a need for co - ordination in the management process. Staff have to be coordinated toward achieving the goal of the firm.
7. There must be proper evaluation, monitoring and control. The execution of the project has to be evaluated with a very strict time frame ant its performance has to be properly monitored and controlled.

Management as a Decision Making Process

A successful manger requires the ability and capacity to make correct decision. The following model indicates the functions of a manager.

- 1) Formulation of goals or objectives of the firm.
- 2) Recognition and definition of a problem or opportunity.
- 3) Obtaining information - observation of relevant facts
- 4) Specification and analysis of alternatives.
- 5) Decision - making - choosing an alternative.
- 6) Taking action or implementation.
- 7) Bearing responsibility for the decision or action taken.
- 8) Evaluating the outcome.

Decisions can be classified on the basis of characteristics like:

- 1) Importance
- 2) Frequency
- 3) Imminence
- 4) Revocability, and
- 5) Alternatives

For the purpose of obtaining proper sequence in production process, the various typical farming decisions are furnished under three major heads (Fig.2.1), namely :

- I. Production and organizing problem decisions
- II. Administrative problem decisions
- III. Marketing problem decisions

Management Approaches

There are many approaches to study management among tem, management by objectives, quality circles, profit center approach and SWOT analysis are the important ones.

Management by Objectives

Management by objectives (MBO) is defined as a comprehensive managerial system that integrates many key managerial activities in a systematic manner and that is consciously directed towards the effective and efficient achievement of organizational and individual objectives.

Emphasis on Performance Appraisal

In the traditional approach, managers are required to pass judgment on the personal worth of subordinates. In MBO approach, subordinates assume the responsibility of setting short-term objectives. Primarily subordinate then evaluates performance against the set objectives themselves. This approach encourages self-appraisal and self-development, the emphasis is where it ought to be on performance rather than on personality. The active involvement of subordinates in the appraisal process leads to commitment and creates an environment for motivation.

Inclusion of Long - range Planning in the MBO Process

In the MBO programs that emphasis performance appraisal and motivation, the focus tends to be on short-term objectives. This orientation, unfortunately may result in undesirable managerial behaviour. For example, a production manager, in an effort to reduce maintenance costs, may neglect the necessary expenses for keeping the machines in good working order. The break down of machinery may not be evident at first, but it can result in costly repairs much later. In an effort to show a good return on investment in a given year, the nurturing of good customer relations may be neglected. Similarly a manager may not invest in new products that would take several years before contributing to profit. Recognizing these shortcomings, many organizations now include long-range and strategic planning in MBO programmes.

The System Approach to MBO

Management by objectives has undergone many changes; it has been used in performance appraisal as an instrument for motivating individuals, and, more recently in strategic planning. But there are other managerial subsystems that can be integrated into the MBO process they include design of organizational structures, portfolio management, management development, compensation programmes and budgeting. These various managerial activities need to be integrated into a system. For MBO, to be effective, has to be viewed as a comprehensive system. In short, it must be considered a way of managing, and not an addition to the

managerial job.

The Process of Managing by Objectives

It includes setting preliminary objectives at the top, clarifying organizational roles, setting subordinates objectives and recycling objects.

Benefits and Weakness of MBO

One can learn from experience and research by taking a realistic view and analyzing some of the benefits and weaknesses of MBO.

Benefits of MBO

Saying that it results in greatly improved management can summarize all the advantages of MBO. Other benefits of MBO approach are classification of organization roles and structures, encouragement of personal commitment and development of effective controls.

Weaknesses of MBO

With all its advantages, a system of management by objectives has a number of weaknesses. Most are due to shortcomings in applying the MBO concepts. Some of the specific shortcomings are

- a) failure to reach the philosophy of MBO
- b) failure to give guidelines to goal setters
- c) difficulty of setting goals
- d) emphasis on short-run goals and

- e) danger of inflexibility

Quality Circles

Quality control circles or simply quality circles (QC), are groups of people, from the same organizational area, who meet regularly to solve problems they experience at work. Members are trained in solving problems, applying statistical quality control and working in groups. Usually a facilitator works with each group, which normally consists of six to twelve members. Although QC members may receive recognition they usually do not receive monetary rewards. Quality circles evolved from suggestion programmes. In both approaches workers participate in solving work related problems. Although in suggestion programmes the problems are usually quite specific, those deal with by quality circles are often more complex and require involvement of several team members. The team consists of primarily of rank- and - file workers and sometimes includes supervisors. So-called efficiency experts are usually excluded from the team. The concept of quality control originated in the USA, but the Japanese have perfected it. In a world market, faced with a competitive situation that demands quality products, quality circles are used and implemented by many organizations.

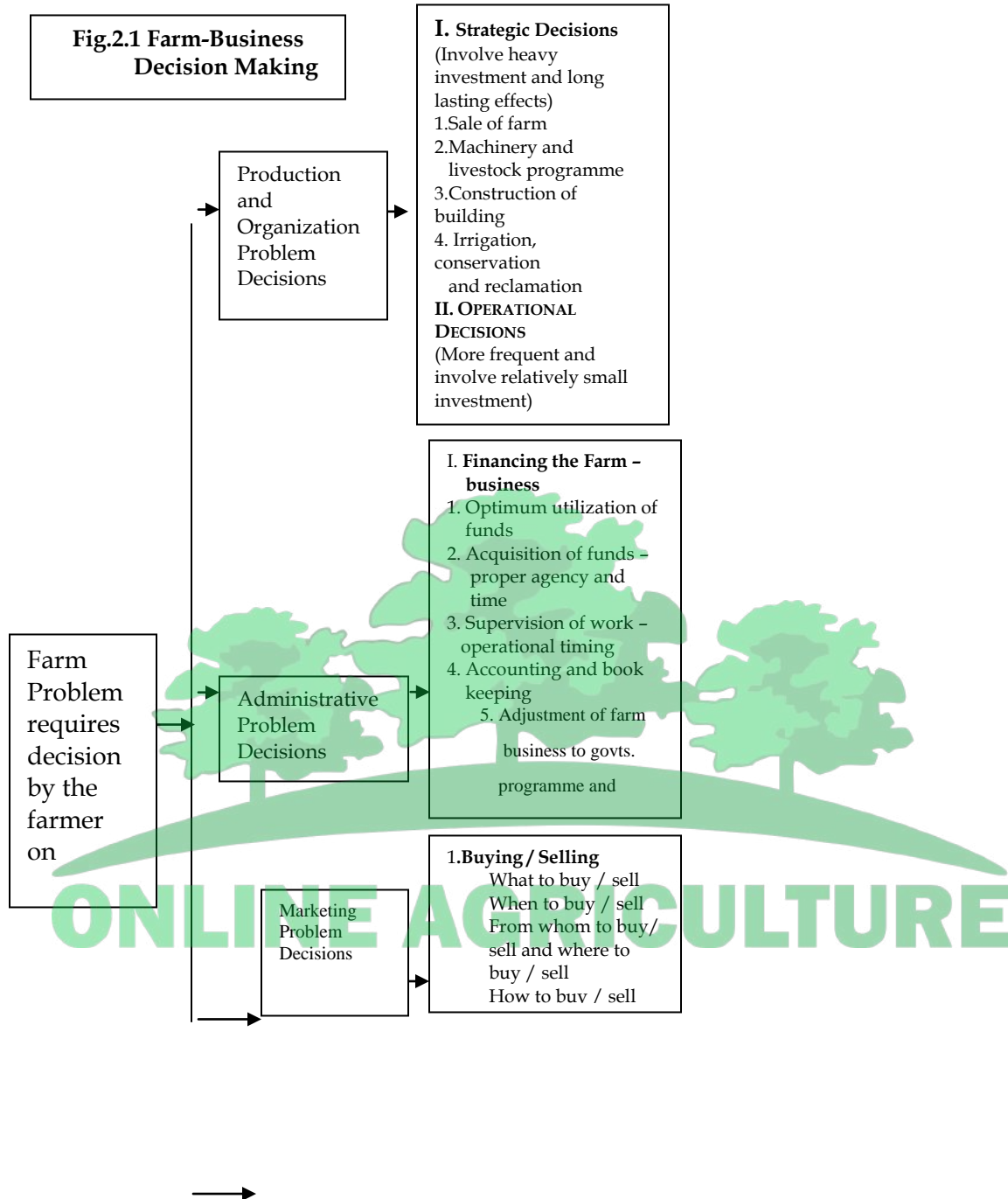
Management by Profit Centered Approach

The emphasis on productivity and by extension, profitability led to scientific management from classical theory of management. The profit centered management approach fostered a rational approach to solving organizational problems. More importantly it laid the groundwork for professionalism of management. The profit-centered approach to management was limited by underlying assumptions about human beings. The assumptions were that people were 'rational' and motivated by 'economic' and 'physical.' needs of workers as a group failing to consider the tensions created when these needs are frustrated.

SWOT Analysis

Most of the firms adopt a very casual and haphazard approach to the generation of project ideas. To stimulate the flow of ideas, 'SWOT' analysis approach will be useful. SWOT is an acronym for strengths, weaknesses, opportunities and threats. SWOT analysis represents conscious, deliberate, and systematic effort by an organization to identify opportunities that can be profitably exploited by it. Periodic SWOT analysis

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4. PLANNING

Planning is the beginning of all the other processes of management-organizing, staffing, directing, communication and control.

Planning is deciding in advance what to do, how to do, when to do and who is to do it. Planning bridges the gap from 'where we are' to 'where we want to go' (Koontz and O'Donnell).

In the words of Theo Haimann, "Planning is the function that determines in advance what should be done. It consists of selecting the enterprise objectives, policies, programmes, procedures and other means of achieving their objectives.

Characteristics

1. Planning

Planning is an intellectual exercise. It is concerned with thinking in a creating way as to how the existing combination of resources may be adjusted and adapted to match the emerging opportunities.

Planning enables the management to make decisions regarding a) what is to be done; b) how it is to be done; c) when it is to be done; and by whom it is to be done.

2. Planning and Forecasting

Forecasting describes what one expects to happen if no changes are made to escape that happening. Planning describes what one wants to happen.

3. Accomplishment of Group Activity

Planning is essential to any goal directed activity. It enables people with divergent perceptions and motivations to work together to achieve common goals.

4. Choice between Alternatives

Planning seeks to adjust and adapt the existing mix of resources to meet the emerging opportunities. The first choice to be made by management is with regard to objectives of the business, i.e., profitability, growth, consumer satisfaction, man power development, prestige, and so on. The next choice is in respect of the strategy to be adopted to accomplish the objectives. Then comes the operational part, i.e. determining the time frame, assignment of tasks and other resources for the accomplishment of the objectives.

5. Pervasiveness of Planning

Involvement of managers at levels is essential to the success of planning.

6. Flexibility

Successful running of an organization involves matching of its resources with the emerging opportunities in the business environment.

7. Integrated Process

Planning involves selection of achievable objectives, and formulation of simple and realistic policies, programmes, procedures etc., for the accomplishment of that objective. Effective planning takes care of the conflicting views and settles for a course of action that is in the maximum interest of the organization, besides being satisfying to the personnel involved.

Importance of Planning

1. Selection of "Optimum" Goals

Planning involves rational thinking and decision - making concerning a proposed course of action.

2. Tackling Increasing Complexities

An organization is a heterogeneous group of human beings who differ from one another in many respects. It is unlikely that they will work effectively and harmoniously in the interest of the organization, unless they have a plan.

3. Meeting Environmental Changes

Business environmental changes more rapidly in terms of social values, competition, new product discoveries and consumer's tastes and preferences - and these changes will upset any organization. Only proper and effective planning can help the management by adjusting and adapting the inputs and transformation process to suit the environmental changes.

4. Safeguard against Business Failure

Business failures are blamed on cut-throat competition, unpredictability of consumer tastes and preferences, rapid technological changes and abrupt economic and political development. However, in many cases, failure is caused due to rash and unscientific decision – making. Planning cannot avert all business failures. But it forces the management to assess and evaluate each emerging business opportunity and problem, and examine the various courses of action to meet it effectively.

5. Effective Co-ordination and Control

Planning makes it easy to exercise control and co-ordination. The work to be done, the persons and the departments which have to do it, time limit within which it is to be completed and the cost to be incurred, are all determined in advance.

Limitations of Planning

1. Uncertainty

Assessment of future can only be in terms of guess work, probabilities, speculations and assumptions. The goals may be based on scientific analysis of relevant facts, and yet such analysis cannot be cent percent correct.

2. Action Packed Routine

Managers are ever preoccupied with day-to-day problems. This leaves them little time to think and plan about the problems of tomorrow.

3. Rigidity

Planning involves setting of objectives, and determination of the ideal course of action for their implementation. It implies that there will be no deviation from the chosen path.

4. Costly

Planning is an expensive exercise, both in terms of time and money.

Steps in Planning

The planning is an expensive exercise, both in terms of time and money.

1. Identification of the Opportunity or Problem

Planning must facilitate the organization to suit it to its environment. The constraints and opportunities provided by the environment may be in the form of government regulations, existing cultural norms, limited financial resources in the capital market, changing technology, production of goods and services as per customer preferences etc. Hence, correct identification of opportunity or problem is the first step of planning.

2. Collection and Analysis of Relevant Information

Effective planning depends on the quality, relevance and validity of the information on which it is based. The sources of information may be classified as external and internal. External source will include suppliers, customers, professional people, trade publications, newspapers, magazines, conferences, etc. Internal sources will comprise meetings, reports, and contacts with superiors, same ranks and subordinates.

3. Establishment of Objectives

Establishment of objectives points out the desired outcome that an organization may aim at stability of operations, growth, a higher rate of return, market leadership and so on.

4. Determination of Planning Premises or Limitations

Planning has to take into account numerous uncertainties in its environment. Important components of the internal environmental are a) technology, b) structural relationship and organization design, c) employee attitude and morale; and d) managerial decision-making process. Internal environment is within the control of management which can appropriately adjust and adapt it to the requirements of the external environment.

Uncertainties relating to the environment are beyond the control of management. These may be in respect of a) fiscal policies of the government, b) economic condition; c) population trends; d) consumer tastes and preferences; e) competitor's plans and activities; and f) personal practices.

Only those factors which are to critically affect the enterprise plans should be identified and evaluated.

5. Examining alternative course of action

Often, there will be more than one action plan to achieve a desired objective. For example, if the objective is to maximize profits and there are no limits to increasing production, the objective can be achieved through, either tapping unexpected markets, or intensifying sale efforts in the existing markets, or increasing the price, or diversifying production. The number of alternative plans prepared by a manager would depend on this imagination, skill and experience.

6. Weighing Alternative Courses of Action

Evaluation of each alternative action-plan will have to be from different points of view, namely, a) its effectiveness in contributing to the accomplishment of organizational objectives; b) its ability to withstand the effects of environmental changes; and c) its integration with on going action plans.

7. Selecting a Course

Whether the evaluation of various alternatives is directed by individual preferences and prejudices, or it is based on mathematical and statistical techniques, the course of action is to be optimum, or the best under the circumstances. Selection of the best course of action depends on resource availability, objectives, efficiency and economy.

8. Determining Secondary Plans

Secondary plans flow from the basic plan. These are meant to support and expedite the achievement of the basic plans. For example, once the basic plan is decided upon, a number of secondary plans dealing with purchase of raw materials and machines, hiring and training of workers and so on would have to be prepared to facilitate execution of the basic plan.

9. Providing for Future Evaluation

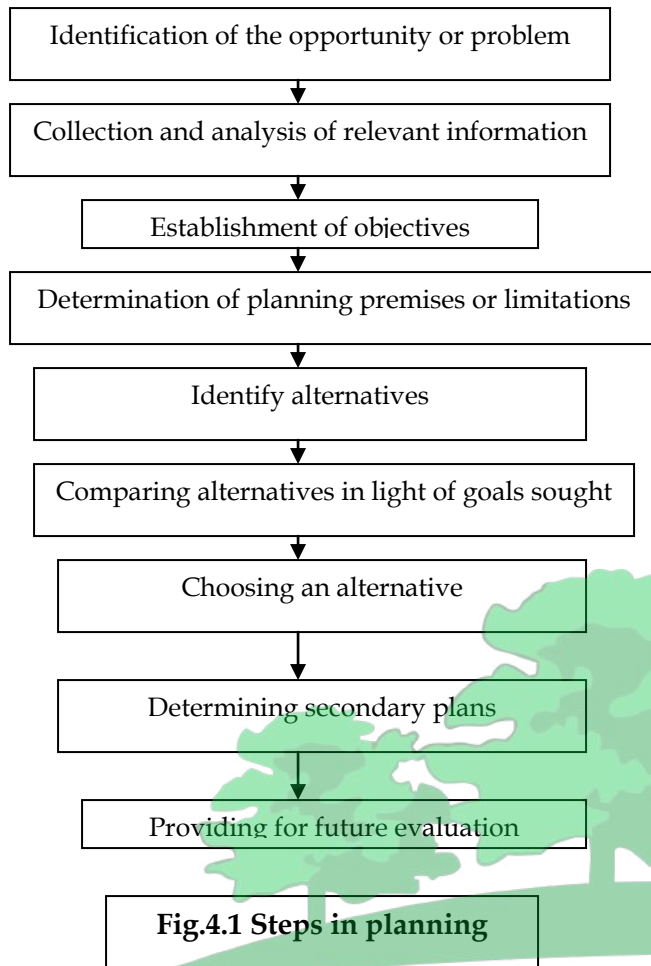
In order to ascertain if plans selected for the purposes are proceeding along right lines, it is necessary to devise a system for continuous evaluation of plan.

Long Range and Short Range Planning

Planning is often classified on the basis of the length of the period covered by it. Accordingly, there may be long range and short range planning. However, the length of the planning period will depend on the organizational level at which planning is being done-the type of business, the production cycle, managerial practices, etc.



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Long-Range Planning

Long-Range planning covers a long period in future, e.g., five or ten years, and, sometimes even longer. It is concerned with the functional areas of business such as production, sales, finance and personnel. It also considers long-term economic, social and technological factors which affect the long-range objectives of the enterprises. All enterprise activities are directed to achieve the targets set by long-range planning. Long-range planning is also called **strategic planning**, because it is concerned with preparing the enterprise to face the effects of long-term changes in business environment, such as entry of new products, new competitors, and new production techniques and so on.

Short-Range Planning

Short-range planning, also called **tactical planning**, covers a short period, usually one year. It deals with specific to be undertaken to accomplish the objectives set by long-range planning. Thus, it relates to current functions of production, sales, finance and personnel.

Planning to accomplish Specific Goals

While long range and short-range planning encompass all the functional area of the enterprise, planning to accomplish certain specific goals cover one or a few of these areas. But such planning is only supplementary to long-range or short range planning of the enterprise and, in a sense; it can be called intermediate planning.

1. Production Planning

It concerns with sales and production planning. That is,

- a) Determining the extent to which a particular product is acceptable to consumers,
- b) Estimating the amount of anticipated sales
- c) Determining the period up to which a product would be in demand
- d) Developing a new product to replace the old one, or improving the existing product.
- e) Intensifying sales in the existing markets and developing new markets.

2. Project Planning

It concerns with a specific project or plan, such as setting up a new factory or plant, or schemes relating to modernization, amalgamation, or absorption of existing enterprises.

Types of Plans

On the basis of the length of the planning horizon, plans may be long-term, medium-term a short-term.

Depending on their nature and scope, plans can be broadly classified as follows:

1) Standing or repeated use plans

- a) Objectives
- b) Policies
- c) Procedures
- d) Rules
- e) Strategies

2) Single - use plans

- a) Programmes
- b) Budgets

1. Standing or Repeated Use Plans

Standing or repeated use plans are those which are developed by the organization to serve as guidelines with respect to activities which will occur frequently over time.

a. Objectives

Objectives may be defined as the future results or a desired state of affairs which the organization seeks and strives to achieve.

According to Charles Perrow, objectives are categorized into:

- i) **Societal** objectives which are concerned with creation and maintenance of cultural values through the production of goods and services.
- ii) **Output** objectives, concerned with the kind of output i.e., durable goods etc.
- iii) **System** objectives, concerned with quality, innovativeness of the goods and services
- iv) **Derived** objectives concerned with secondary areas, e.g., community development.

b) Policies

Policies may be defined as guide, thinking and action of those who have to make decisions in the course of accomplishment of the enterprise objectives.

The following points must be borne in mind while formulating a policy:

- i) Broad outlines, leaving it to the managers to decide within its frame work.
- ii) consistent (Policies should not be contradictory to each other)
- iii) Adequate number (without duplication)
- iv) Sound and practicable
- v) Flexible

C. procedures

Objectives and polices do not lay down ways and means through, which objectives are achieved. So this drawback is eliminated by producer which determine

- i) the specific tasks to be performed
- ii) the time when these tasks will be performed
- iii) the persons who will perform them

d) Rules

A rule means a decision made by the management regarding what is to be done and what is not to be done in a given situation. Rules do not leave any scope for decision making. Nor do they permit any deviation.

e) Strategies

Strategies concern with how the organization plans to meet the uncertain and competitive world outside, and makes different assumption as regards the tactic and strength of the competitors. Formulation of a strategy is influenced by the external and internal environments of the organization. The external environmental consists of opportunities, threats and constraints, and the internal environment reflects the strength and weakness of the organization.

Projects are large, discrete and well defined tasks. A long-time lag is inevitable between the beginning of a projects and its completion.

b) Budget

A budget is plan relating to a period of time, expressed in numerical terms. A budget may cover projected activities of a firm for a definite period of time, providing pre determined standards of performance in the fields of sales, purchases, production, income, expenditure, investment and profit. The standards are set considering the objectives and resource position of the enterprise. They also serve as a basis of evaluating the performance in various fields, and for correcting the deviations and deficiencies, if any.

Objectives of Budgeting

1. Planning the action to be pursued within a specific period.
2. Coordinating the activities in different fields of enterprises.
3. Controlling: Deviations and deficiencies can be corrected.
4. Motivation: Budgeting provides specific goals-which can be accomplished.

5. ORGANIZING

Organization means a system with parts which work together, or system with parts dependent upon each other. According to Louis Allen, organization is a process of identifying and grouping the work to be performed, defining and delegating responsibility and authority, and establishing relationships for the purpose of enabling people to work most effectively together in accomplishing objectives.

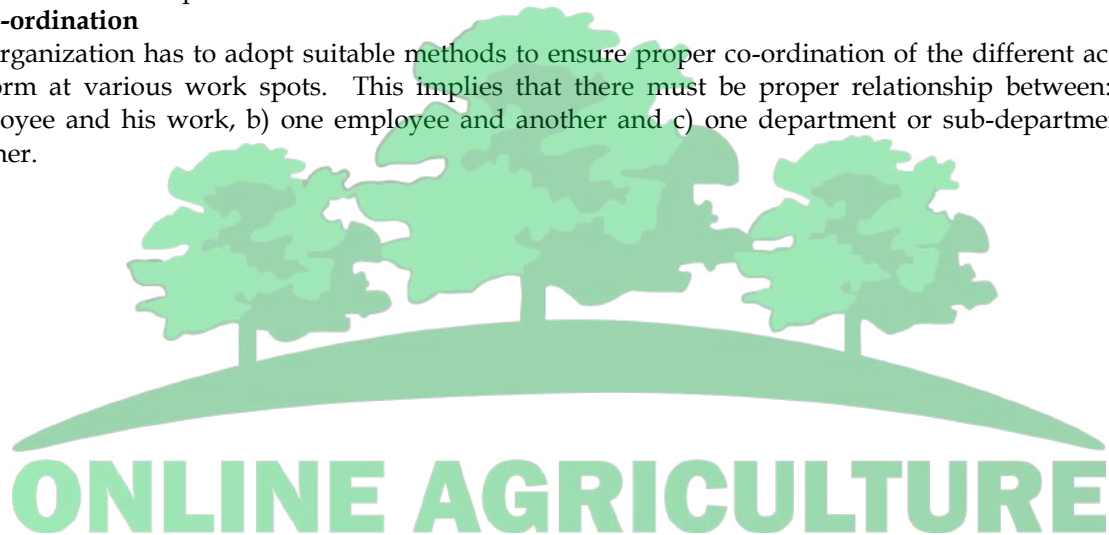
Nature or Characteristics of an Organization

1. Division of Labour

It is the root of any organization structure. In order to improve the efficiency of any organization, the total efforts of persons who joined together for common purpose have to be divided into different functions. These functions are further divided into sub-functions each to be performed by different persons. After the division of the total effort into functions and sub-functions, the next step is to group the activities on the basis of similarity of work. For example, in a manufacturing enterprise, its total activities may be divided and grouped under a) Production, b) Marketing, c) Finance and d) Personnel. Even within each of these groups or departments, one or more sub-departments or sections may be created to look after particular activities.

2. Co-ordination

An organization has to adopt suitable methods to ensure proper co-ordination of the different activities perform at various work spots. This implies that there must be proper relationship between: a) an employee and his work, b) one employee and another and c) one department or sub-department and another.



3. Objectives

Objectives of a business cannot be accomplished without an organization; similarly an organization cannot exist for long without objectives and goals.

4. Authority - Responsibility Structure

For successful management, positions of personnel are so ranked that each of them is subordinate to the one above it, and superior to the one below it. Management authority may be defined as the right to act, or to direct the actions of others.

5. Communication

For successful management, effective communication is vital because management is concerned with working with others, and unless there is proper understanding between people, it cannot be effective. The channels of communication may be formal, informal, downward, and upward to horizontal.

Process of Organization

The important steps in organization process are as follows:

1. Determining the Activities to be performed

The first step in this process is to divide the total effort into a number of functions and sub-function each to be performed, preferably, by a single individual or a group of individuals. Thus, specialization is a guiding principle in the division of activities.

2. Assignment of Responsibilities

It involves selection of suitable persons to take charge of activities to be performed at each work point. Also, the tasks to be performed by each member or group should be clearly defined.

3. Delegation of Authority

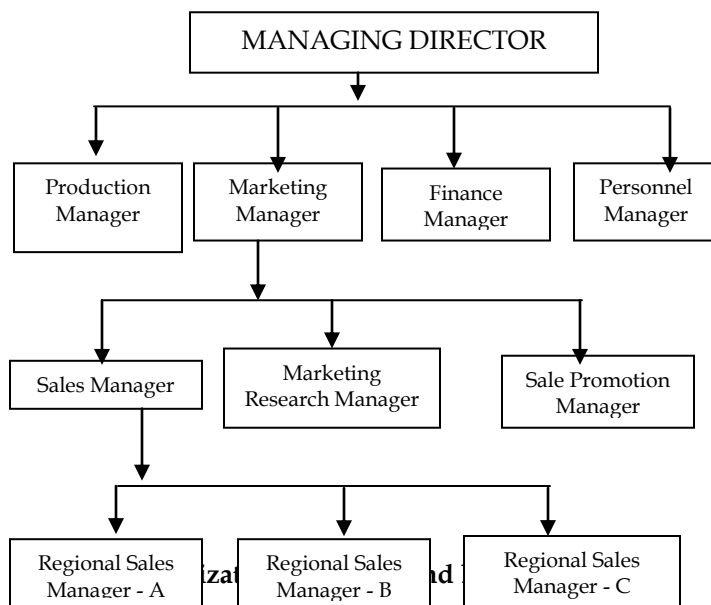
Along with the assignment of duties, there should be proper delegation of authority. It would be unrealistic to expect an individual to perform his job well if he lacks the authority to secure performance from his subordinates.

4. Selecting Right Men for Right Jobs

Before assigning a particular task to an individual, his technical competence, interests, and aptitude for the job should be tested. If the individual concerned lacks the technical ability to do his job, he can not perform it to the best of his ability.

5. Providing Right Environment

It involves provision of physical means like machines, furniture, stationery etc. and generation of right atmosphere in which employees can perform their respective tasks.



Key Elements of Organization Process

The following may be said to be the key elements in the process of organization.

1) Departmentation, 2) Delegation and 3) Decentralization.

1. Departmentation

Departmentation implies the grouping of various activities on the basis of their similarity, into separate units. Departmentation of the enterprise activities can be done by:

a) **Functions:** production, sales, finance and personnel departments can be created.

b) **Production:** For each product or group of products, a separate department is created.

c) **Territory:** For each geographical division or territory, a separate department is created.

d) **Customer:** Departmentation by customer is followed to look after the sales function where, in the interest of efficiency and economy, special attention needs to be given to different customers.

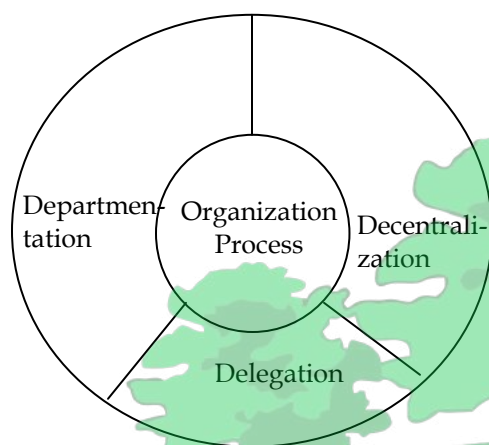


Fig. 5.2. Key Elements of Organization Process

e) **Number:** In case departmentation by numbers, activities are grouped on the basis of their performance by a certain number of persons, whereas under departmentation by time, activities are grouped on the basis of the time of their performance.

2. Delegation

The delegation has three important features, namely,

a) Assignment of duties and responsibilities.

b) Delegation of authority to perform the assigned duties and responsibilities.

c) Accountability.

3. Decentralization

Decentralization is the opposite of centralization. Under centralization, the decision-making authority is vested in the hands of one or a few individuals.

Decentralization refers to dispersal of decision-making authority. It means that decisions are to be made by persons and at places away from the centre.

Decentralization may take the form of: a) departmentation or divisionalisation of enterprise activities; b) dispersal of decision-making powers among executives at various levels.

Importance of Organization

1. Efficiency in Management

Planning, direction and control can have meaning only when these functions are undertaken within the frame work of a properly designed and balanced organization. Organization is an effective instrument for realizing the objectives of an enterprise.

2. Instrument of All Round Development

A balanced organization helps an enterprise to grow and enter new lines of business. It can achieve the necessary momentum and adaptability to meet the various challenges posed by the environmental forces.

3. Adoption of New Technology

In a rapidly advancing world, changes are bound to take place in the techniques of production, distribution and man-power management. An effective management can foresee such changes in environment which will involve rescheduling of activities as a new approach to delegation of authority and responsibility.

4. Aid to Initiative

For an organization to continue to remain effective, it is necessary that it encourages initiative among its staff. Then alone, it can discover talents and creativity among its employees.

Principles of Organization

The structure of the organization should be designed such that it achieves the stated goals. The basic principles of an organization are:

1. Objectives

The objectives of an organization are decisive in the determination of its structure. Does it plan to produce a single product to begin with, and then go on adding to its product-line as the financial resources permit? Does it want to produce quality product? Does it plan to retain customer goodwill by providing after sales services? All these questions will influence the organization structure.

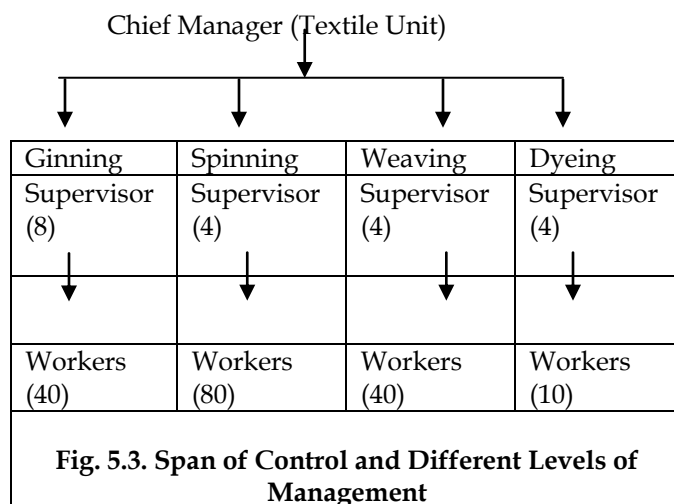
2. Unity of Command

The unity of command stipulates that each is responsible to only one superior. If a subordinate is made to follow the orders from more than one boss, he will be in a perpetual dilemma and not know whose orders should be carried out first, how to allocate his time between different bosses, so as to satisfy them all and displease none, and what to do in case of conflicting orders.

3. Span of Control

The span of control refers to the number of subordinate managers reporting to a single senior manager stationed above them in the management pyramid. The span of control should be legitimate (neither too wide nor too narrow) without split in the line of control.

The optimum span must be determined for each enterprise taking into account all the variables - organizational and human - the nature of enterprise, its traditions, tasks and ambitions. The span of control will differ from level to level; the optimum span should be determined individually for the different levels of management.



However, there is no consensus on how many reporting subordinates is the best number for next senior who takes the report. According to Gillmore, in the case of most organizations, there should be no more than six levels of management, including that of the chief executive.

4. Scalar pattern

This principle is sometimes, known as the chain of command. The line of authority from the chief executive at the top to the first line supervisor at the bottom must be clearly defined. The authority chain travels down the scalar line. Each position or level in the chain of command (authority) reports to the next superior and the process is repeated till the top is reached. Each such position enjoys formal authority depending upon the

- i) position in the scalar chain and
- ii) status of centralization or decentralization in the organization.

5. Clear Definition of Authority and Responsibility

Authority may be defined as the power to make decisions which guide the actions of another. Responsibility is the obligation of a subordinates to whom a superior has assigned a task, to perform the service as required. Duty or responsibility may be in terms of functions, or in terms of targets or goals. The authority and responsibility of each manager should be clearly defined in writing such that he knows what is expected of him and the limits of his authority to get it done.

6. Balance between Authority and Responsibility

If any responsibility assigned to a manager is not matched by the authority delegated to him, he will not be able to get the desired performance from his subordinates.

7. Absolute Responsibility of Managers for Acts of Subordinates

While authority can be delegated, responsibility is not. The manager continues to be as responsible as the subordinates concerned for what the latter has done, or failed to do.

8. Power

It is the ability of a person to influence another person to perform an act. There are five types of power: reward, coercion, reference, expertise, and legitimacy.

The difference between authority and power are given below:

| Authority | Power |
|---|--|
| 1. It rests on the chain (or position). With the change in the position, the authority of individual also changes. | It rests on the individual. Even if his position has changed, his power remains unchanged. |
| 2. It is delegated to an individual by his supervisor. | It is earned by an individual through his own efforts. The individual gets it from people below him or from his peers. |
| 3. It is mostly well defined ,conspicuous (shown on the organization chart) and finite in commensurate with responsibility. | It is undefined, inconspicuous and infinite. Its location cannot be known from the formal organization chart. |
| 4. It is what exists in the eye of the law. | It is what exists intact. |
| 5.It serves as a basis of formal organization | It serves as basis of informal organization. |

9. Accountability

The subordinate is accountable for his actions and omissions. The accountability improves his responsibility and there by his performance. Every position in the organization structure should be assigned specific tasks, as also individuals or groups who are accountable for the accomplishment of those tasks. Care should be taken to see that people who are accountable for the performance of the given tasks have the required ability and information to carry out those tasks.

10. Delegation

The three elements i.e., assignments of duties, delegation of authority and accountability for the performance of duties and responsibilities and exercise of authority are together termed as delegation. The entire process of delegation involves the determination of results expected, the assignment of tasks, the delegation of authority for accomplishment of these tasks, and the exaction of responsibility of their accomplishment.

Decentralization is a pattern of responsibility arising from delegation.

Distinction between Delegation and Decentralization

| Delegation | Decentralization |
|---|--|
| 1. It is an act, or a process | It is the end-result of delegation and dispersal of authority at various levels. |
| 2. It refers to relationship between two individuals i.e., a superior and his immediate subordinates. | It refers to relationship between the top management and various departments and division in the enterprise. |

11. Job Range and Depth

The job range refers to the manageable size of the work while the depth refers to the extent of the job rectification or perfection.

Job Range: A weaving master can manage, for example, 10 weaving units.

Job Depth: Day to day rectification of mechanical failure, major trouble in weaving machine has to be attended by the mechanical/textile manager.

12. Specialization

Specialization is acquired when a person (or a department or division) devotes his time to the performance of single leading operation. It is the key to efficiency and effectiveness. Specialization is concerned with delegation of authority horizontally rather than vertically.

13. Distinction between Line and Staff Functions

Line functions are concerned with the accomplishment of the main objectives of the organization. In a manufacturing unit, for example, production and sales are the line functions which are basic to the organization. As against this, staff functions are those which are of an advisory nature and auxiliary to the line functions. Departments concerned with purchases, advertising, public relations, legal services only provide advice and aid to the line departments.

Staff personnel do not generally have authority to implement any change. They only offer advice or recommendation which may not be accepted by the line personnel.

14. Flexibility

Flexibility in the organization structure is necessary to enable it to adjust and adapt itself to any change in its environment, e.g., conditions of booms, depression, political instability etc.

15. Simplicity

The organization structure should be simple i.e., with as few levels of authority as possible, such that there is free communication between persons operating at different levels, thus making for effective co-ordination.

Patterns in Organization Structure

The organization structure is determined by the nature and size of an enterprise. The pattern of organization structures commonly to be found is:

- i) Line organization
- ii) Functional organization
- iii) Line and Staff organization
- iv) Project organization
- v) Committee organization
- vi) Free-form organization

i) Line organization

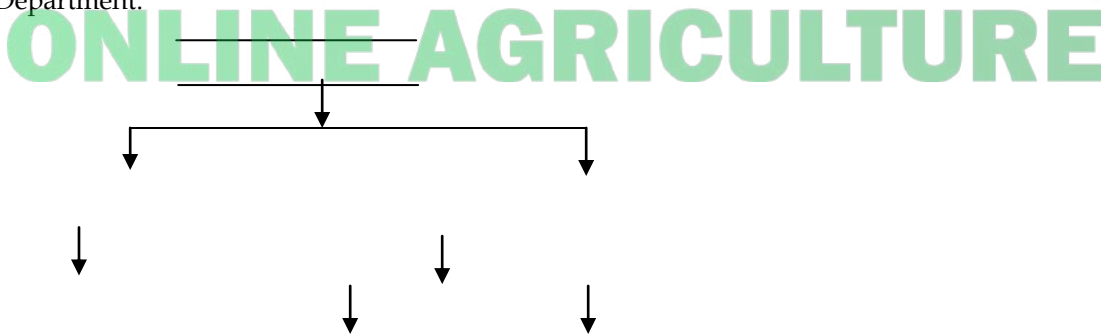
Under this, the persons having the greater decision-making authority are placed at the top, and those having the least decision-making authority are at the bottom. In between, there are other levels of management, such as intermediate and supervisory. The superior at each level makes decisions within the scope of the authority delegated to him by his boss. He communicates his decisions and orders to his subordinates.

ii) Functional Organization

A functional organization is one where the work is organized on the basis of specialization. Each specialist conveys his instruction direct to the line personnel, rather than through a formal chain of command. Functional organization improves specialization and thereby the efficiency.

iii) Line and Staff organization

A line and staff organization is one where specialist advisers, in the role of functional managers, assist the line managers in the performance of their duties. In a firm engaged in the production of textiles, the production manager (in-charge of production) the marketing manager (in-charge of sales) and the finance control (in-charge of financial matters) may be treated as line executives, and their department is called Line Department.



General Manager

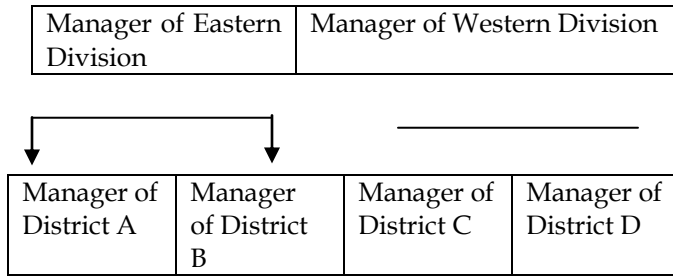


Fig.5 .4. Line Organization

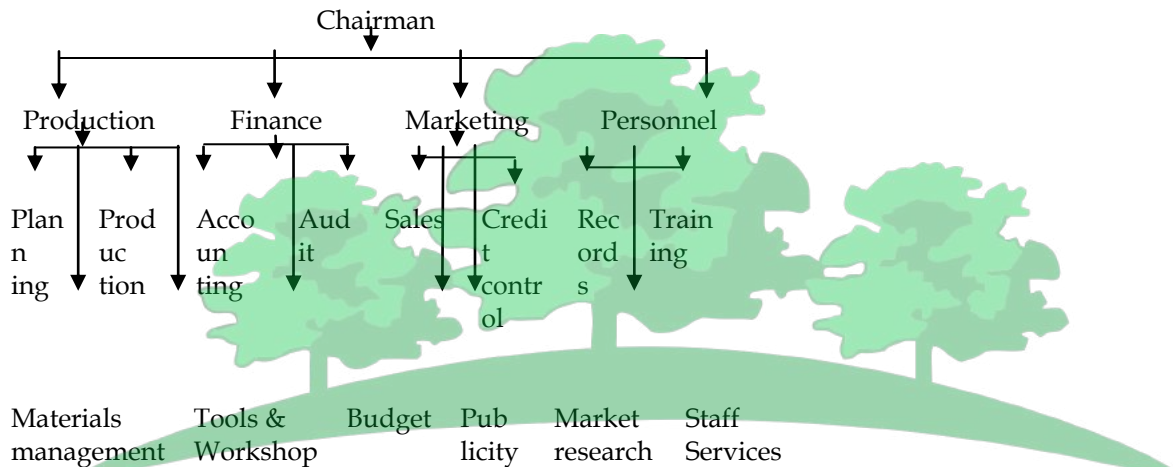


Fig. 5.5 Functional Organization

Line executives have direct control over the subordinates under them. Staff executives have no such authority. They are only meant to aid and advise the line managers at the same level.

iv) Project Organization

It is set up with the objective of overcoming the major weaknesses of the functional organization, namely, absence of unity of command, delay in decision-making, and lack of co-ordination.

In a project organization a division or department charged with completion of a specific programme may exist for a relatively long time. A project organization can also be the beginning of an organization. The project may become a long-term or permanent effort that eventually becomes a programme (or branch) organization. The latter may in turn become separated from the parent organization and be established as a full-fledged product division functionally organized.

v) Committee Organization

A committee means a group of persons formed for a special purpose. Committees are of the following types.

a) Standing or ad-hoc Committee: Standing Committee is a permanent one which is routinely chaired by the incumbent

Ad-hock committee is a temporary special purpose committee which is appointed to deal with specific problem.

b) Executive or Advisory Committee: An executive committee has the responsibility of making and executing its decisions. An advisory committee only examines a specific problem and gives its recommendations.

vi) Free-form Organization

A free-form organization is similar to project organization and it is adhoc-in nature.

The job in free form organization cannot be defined with certainty. Specific tasks are assigned to persons considering their expertise and competence.

Horizontal Integration of Firms

The firms producing similar or identical products come together so that their collective bargaining power increases.

Milk producers, vegetable growers, oil seed growers and so on can form union to have more bargaining powers. In this type, the middlemen are avoided, consumers are not exploited and the marketing cost is reduced so that the producers can get major share in the consumer's rupee.

Vertical Integration of Firms

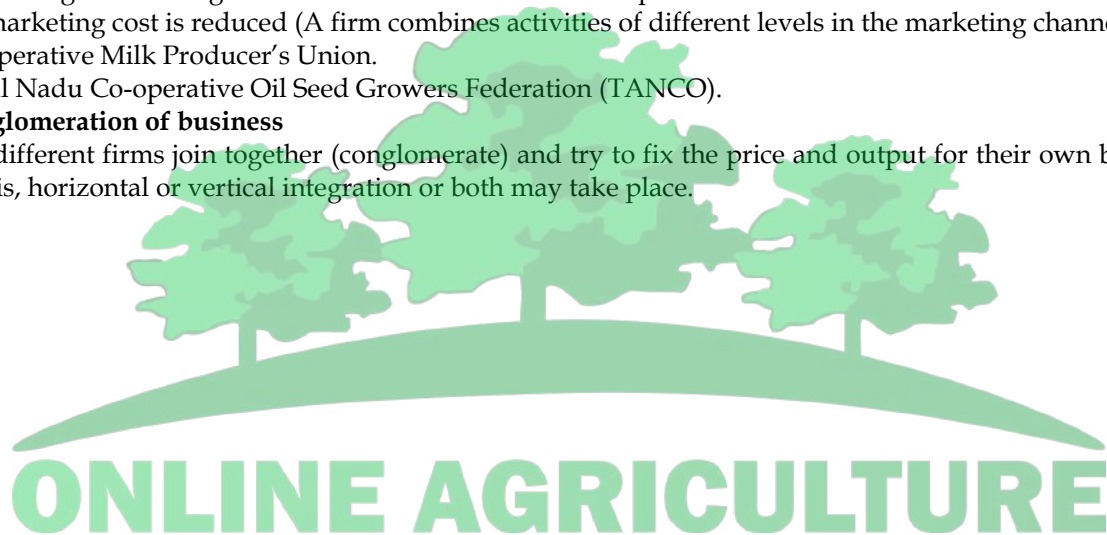
The various firms which are engaged in processing the products at different levels can be merged. A single firm may be engaged in more than one process. The marketing channel can be shortened by eliminating or reducing the number of middlemen. Both producers and consumers can be benefited as the marketing cost is reduced (A firm combines activities of different levels in the marketing channel).

Co-operative Milk Producer's Union.

Tamil Nadu Co-operative Oil Seed Growers Federation (TANCO).

Conglomeration of business

The different firms join together (conglomerate) and try to fix the price and output for their own benefit. In this, horizontal or vertical integration or both may take place.



6. DIRECTING

Directing is concerned with telling subordinates what to do and seeing that they do it as best they can. It includes assigning tasks and duties, explaining procedures, issuing orders, providing on-the-job instructions, monitoring performance, and correcting deviations.

Directing must have two dimensions, namely a) magnitude and b) aim or direction.

The directing function includes the following:

- i) Supervising
- ii) Guiding
- iii) Leading
- iv) Motivating, and
- v) Communicating

i) Supervision

The aim of supervision is to ensure that sub-ordinates work efficiently to accomplish the tasks assigned to them. Directing and supervising are similar in the sense that both seek to motivate the subordinate staff and provide leadership so that the predetermined goals are effectively accomplished. However, only the lowest level managers are designated as supervisors. One reason for this is that while all other levels of management have sub-ordinates who are managers themselves, the supervisory staff deals with workers who are engaged in basic operations.

Qualities of a Good Supervisor

1. Knowledge about the organization
2. Technical competency
3. Ability to instruct and explain
4. Ability to listen to others to information, to solve problems, to share experiences etc.
5. Ability to secure co-operation
6. Ability for orderly thinking
7. Ability to judge people
8. Patience
9. Ability to improve worker's morale
10. Ability to enforce discipline
11. Ability to delegate the work among his sub-ordinate

ii) Guiding

This refers to a specialized task of leading the sub-ordinates to accomplish the result by overcoming the hurdles. Direction and purpose are very important for a manager to guide his sub-ordinate.

iii) Leadership

The following definitions refer to different aspects of leadership.

Chester Barnard: Leadership is the ability of a superior to influence the behaviour of his subordinates and persuade them to follow a particular course of action.

Allen: Leader is one who guides and directs other people. He must give effective direction and purpose.

George R. Terry: Leadership is the activity of influencing people to strive willingly for mutual objectives.

Robert C. Appleby: Leadership is a means of direction, is the ability of management to induce sub-ordinates work towards group ideas with confidence and keenness.

The following are the primary functions of a leader. He acts as:

- 1) Executive, 2) Planner, 3) Policy maker, 4) Expert, 5) External group representative, 6) Controller of internal relations, 7) Conveyor of rewards and punishments and 8) Arbitrator and mediator.

Types of Leaders

1. **Autocratic** wants to run show all by himself.
2. **Laissez Faire** or Free rein leader permits his followers to do whatever they want to do.
3. **Democratic** leadership is based on the assumption that the leader derives his power by consent of the followers. Participation, consultation and agreement of the group members are important features of democratic leadership.
4. **Expert or Functional** leader does not have any formal authority. He stands out because of his special qualifications for the job handled by him, which is also the main reason why followers look up to him for guidance and control.
5. **Institutional** leader is one who wields power over his followers due to the position or office occupied by him in the organizational hierarchy.

Qualities of Leadership

According to Henry Fayol, the qualities that a leader must possess are:

- i) health and physical fitness
- ii) mental vigour and energy
- iii) courage to accept responsibility
- iv) steady, persistent, thoughtful determination
- v) sound general education, and
- vi) management ability embracing foresight and the art of handling men
- vii) sense of judgment
- viii) understanding or empathy
- ix) motivation
- x) communicating skill

Exercising Leadership

Effective leadership involves democratic directing rather than autocratic commanding. Leadership depends upon the interpersonal influence possessed by the leader. In order to exercise effective leadership, the leader should create a good working environment that contributes materially for the motivation of better work performance. The leader should be skilful in communicating his order down the chain of command, using formal and informal channels.

Once the sub-ordinates are chosen, the leader should try to build effective supervisory relationship with them. The following factors are significant in doing this.

- i) Attitude towards sub-ordinates
- ii) Choice of sub-ordinates
- iii) Training given to them
- iv) Opportunities for their job satisfaction
- v) Rewards for work well done.
- vi) Motivation

Motivation

Variation in individual effort and performance is attributable to the extent to which a person feels motivated to expend mental and physical effort to accomplish the given task.

Motivation refers to goal-directed behaviour. It means what a person will choose to do when several alternatives are available to him. It also refers to the strength of his behaviour after he has exercised the choice, and the persistence with which he will engage in such behaviour.

Characteristics of Motivation

1. A Psychological Concept

Even workers with extraordinary abilities will not be able to perform as desired until they are effectively (psychologically) motivated.

2. Motivation is Total, not Piecemeal

Workers cannot be motivated in piece meal or parts.

3. Motivation is Determined by Human Needs

Once a particular need is satisfied for good, he may lose interest in the activity that provides him satisfaction of the said need. In such a case, he will have to be provided awareness of satisfaction of his other needs so that he continues to be inclined to pursue the said activity.

4. Motivation may be financial or non-financial

Financial rewards: They include salary or wage increase, overtime and holiday payments, bonus, payment made under profit sharing plans, fringe benefits like amenities and facilities at concession rates.

Non-financial rewards: Free conveyance facility to residential areas and place of work, free lunch, provision of own secretary, servants at home, furnished rent free accommodation.

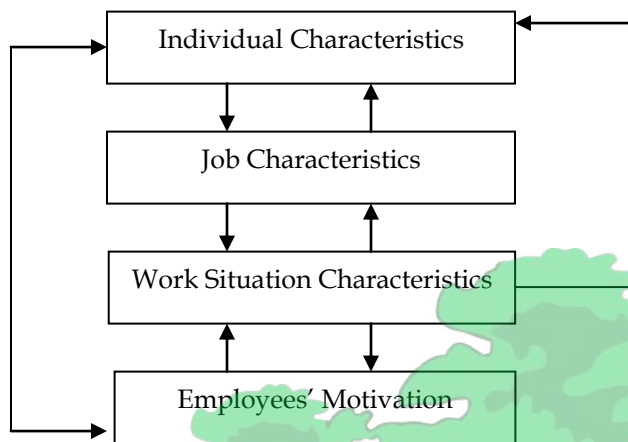


Fig. 6.1 Characteristics of Motivation

5. **Motivation is a constant process:** Human needs are infinite. No sooner a person has satisfied one need than he seeks to satisfy another.

6. **Motivation is the result of interactions among three groups of factors, namely, i) influences operating within the individual ii) influences operating with the organization and iii) influences operating in the external environment.**

V) COMMUNICATING

Communication means sharing ideas in common. It means a verbal or written message, an exchange of information, a system of communicating, and a process by which meanings are exchanged between individuals through a common system of symbols. It also means a technique for expressing ideas effectively.

Nature of Communication

1. It takes Who to Complete Communication

Communication is a two-way traffic. There should be a sender and receiver of a message communicated.

2. Message to be understood in the Same Sense

If the receiver does not understand it, the communication will not be complete.

3. Message to have Substance

The transmitted message should give out ideas, information or facts which should be of interest to the receiver.

4. Communication may be Oral, Written or Gesture

5. Communication may be formal or informal

Formal communication follows the formal channels provided in the organization structure. E.g., Sales manager will communicate with the deputy sales manager.

Informal communication is through personal contacts and it is faster in communicating messages than the formal channels.

Elements of Communication Process

- 1) A communicator who sends message
- 2) Message or information to be communicated
- 3) Encoding i.e., putting the message in suitable words
- 4) Transmission
- 5) Receiver or respondent or audience
- 6) Decoding (understanding the message exactly as it has been sent)
- 7) Response i.e., reaction of the respondent by way of reply, action or use of message

Types of Communication

On the basis of relationship between the parties concerned, communication may be a) formal and b) informal

On the basis of its flow of direction, communication may be a) oral, b) written & c) gesture



7. CONTROLLING

Control means the power or authority to direct, order or restrain. In the context of an enterprise, control may be defined as “comparing operating results with the plans, and taking corrective action when results deviate from the plans”.

Control require two things first, that there is a clear – cut and specific plan according to which any work is to proceed. Secondly, that it is possible to measure the results of operations with a view to detecting deviations.

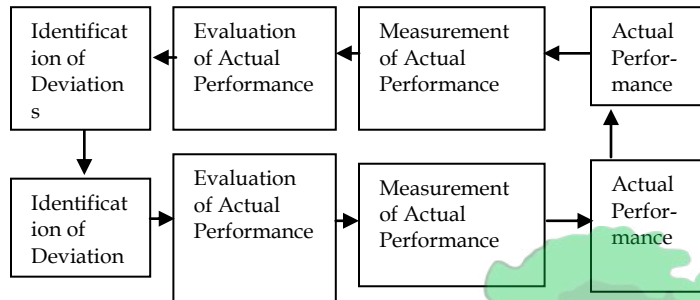


Fig. 7.1. Steps in Controlling Process

Need for Control

A control system is needed for three purposes to

- i) measure progress
- ii) uncover deviation and
- iii) taking corrective action

To Measure progress

The control process measures progress towards those goals. In an undertaking, control consists in varying whether everything occurs in conformity with plan adopted, the instructions issued and principles established.

To Uncover Deviations

Once a business organization is set into motion towards its specific objectives, events occur that tend to pull it 'off target'. Major events which tend to pull on organization 'off target' are as follows:

- i) Changes
- ii) Complexity
- iii) Mistakes
- iv) Delegation

To Indicate Corrective Action

Controls are needed to indicate corrective actions. They may reveal that plans need to be redrawn or goals needed to be modified or their is need for reassignment or clarification of duties or additional staffing.

Steps in a Control Process

There are three basic steps in control process:

- i) Establishing standards
- ii) Measuring and comparing actual against standards
- iii) Taking corrective action

Establishing Standards

Establishing standards against which results to be measured. Identify key areas for establishing standards like profitability, market position, productivity etc.

- i) Physical standards

- Labour hours per unit of output
- Level of production per machine hour

Cost Standard

Direct and indirect costs per unit produced, material cost per unit, selling cost per unit of sale etc.

Revenue Standard

Average sales per customer, sales per capita in a given market area etc.

Capital Standard

Rate of return on capital invested $\text{Current asset} / \text{current liabilities} = \text{current ratio}$.

Intangible standard

Competence of manager and employees. Standards should emphasis the achievement of result more than conformity to rules to methods.

Measuring and Comparing Actual Results Against Standards

Measurement of performance can be done by personal observation while they are engaged in work and by a study of summaries of figures, reports, charts and statements.

Desirable Variations

Output above the standard or expenses below the standard.

Undesirable Variations

A variation in the delivery schedule agreed upon with the customer, or variations in diesel consumption by vehicles.

Who to Introduce a Control System

Whether measurement and comparison are to be done at stages in the total process or at the end. It depends upon purpose. If the purpose of control is to catch trouble while it is forming, then this should be done at various strategic points before the end of the process.

Taking Corrective Action

Compare actual performance with prescribed standards and find deviations. Corrective action should be taken without wasting of time so that normal position can be restored quickly. Identify the causes for deviations like inadequate and poor equipment and machinery, inadequate communication system, lack of motivation of subordinates, defective system of training and selection of personnel, defective system of remuneration etc.

Important Devices or Tools of Control

I. Traditional Devices

1. Budgeting or budgetary control
2. Cost control
3. Production control
4. Inventory control
5. Break-even point analysis
6. profit or loss control
7. Statistical Data Analysis
8. Audit

II. Modern Devices

1. Return on Investment Control
2. Programme Evaluation and Review Technique (PERT)
3. Management Information System (MIS)
4. Cybernetics
5. Management Audit

Traditional Devices

1. Budgetary Control

A budget is a financial plan for a definite period time. Budgetary control evolves a course of action that would make the realization of the budgeted targets possible. **Zero-based budgeting** as a method of budgeting under which all activities are reevaluated each time a budget is formulated.

2. Cost Control

It refers to control of all the costs of an undertaking, both direct and indirect, in order to achieve cost effectiveness in business operations.

3. Production Control

Production control is the process of planning production in advance of operations, establishing the exact route of each individual item, part or assembly, setting, starting and finishing dates for each important item, assembly and the finished product; and realizing the necessary orders as well as initiating the required follow up to effect the smooth functioning of the enterprise.

4. Inventory Control

It refers to controlling the kind, amount, location, movement, and timing of the various commodities used in and produced by the industrial enterprises.

5. Break - Even Point Analysis

The break even point may be defined as the point when sales revenue is equal to total cost (fixed and variable). In other words, it represents the level of activity when there is neither any profit nor loss.

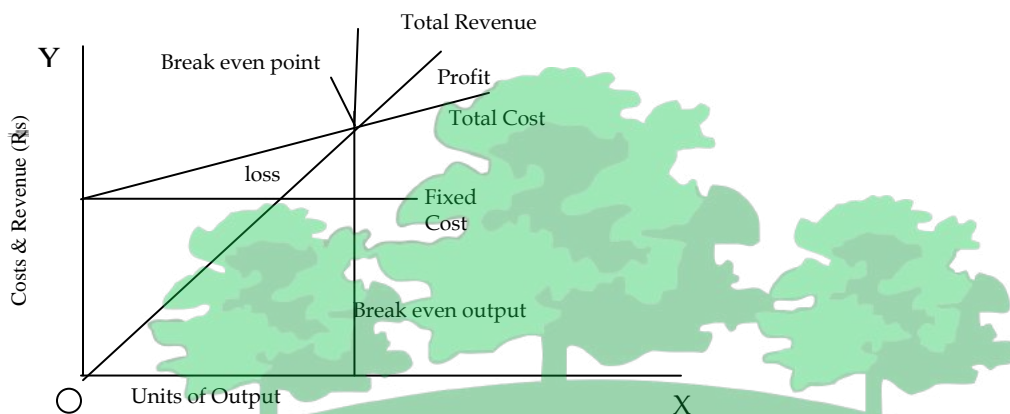


Fig. 5.2. Break even point analysis

| | | |
|-----------------------|----|----------------|
| Selling Price | :: | Rs.200 |
| Variable Cost | : | Rs.300 |
| Contribution Per unit | : | Rs.100 |
| F.C. | : | Rs.1,50,000 |
| B.E. Point | : | 1,50,000 / 100 |
| | | = 1500 units |

$$\text{Breakeven point} = \frac{\text{Fixed overhead}}{\text{Contribution}}$$

$$\text{Contribution} = \text{Sales revenue} - \text{Variable cost}$$

6. Profit and Loss Control

Profit and Loss Control refers to a control system under which sales, expenses, and hence profits of each branch or "product division" are compared with those of other branches and product divisions, as well as with historical trends, with a view to measuring deviations and taking necessary corrective action.

7. Statistical Analysis

Comparison of ratios, percentages, averages etc. of different periods can be done to monitor - deviations and their causes.

8. External and Internal Audit

External audit is enforced by law in respect of all joint stock companies, co-operatives etc. Its objective is to safeguard the interest of the share holder against the malpractices of management. Firms may also have internal audit under which staff members of the company may verify financial transactions and financial records for analyzing the overall control system of the organization.



8. PRODUCTION MANAGEMENT

Functional Areas

In any business organization, the commonly identified functional areas are production, marketing and finance. In recent years, the personnel and materials that go into the production process, packing process and marketing process have gained importance and given due importance by treating it separately as personnel and materials management.

Organization functional areas are

1. Production Management
2. Marketing Management
3. Financial Management
4. Personnel Management
5. Materials Management

The above functional areas are not watertight compartments. The decisions/action taken in one functional area affects the other functional area. The decisions in production and marketing are influenced by the actions on such matters as volume, terms and conditions of loan. The quantity, quality and timely availability of materials also has a bearing on production and marketing decisions. The labour motivation towards work, supervising ability/skill of supervising personnel also affects production and marketing.

Production/Operations Management

In general, operations management refers to management of all operations of a production unit. So it may be interchanged with production management. Production is a system for converting inputs into finished products. The production often refers to manufacturing industries. Yet, in reality, production can be defined as the creation of value or wealth by producing goods and services. Production management refers to planning, organization, direction, co-ordination and control of the production functions carried out in such a way that the desired goods or services could be produced at the right time, in right quantity and at the optimum cost.

The production management involves the following activities:

- a) Developing the product/service
- b) Establishment of proper organization structure
- c) Selection of personnel
- d) Establishment and maintenance of factory building, plant and equipment
- e) Management of purchases, storage, and transportation of raw materials
- f) Ensuring effective control

In production management decisions to be taken consist of

- a) What to produce
- b) When to produce
- c) How much to produce and
- d) How to produce

Production includes a) manufacturing of commodity (physical output) and b) creation of services

Deciding whether to buy or make

The process of changing raw materials into finished products that is delivered to customer is a long process, usually involving many companies performing different productive functions. One company may refine the raw materials, several may perform manufacturing processes, and another may assemble the parts into the finished product and so on. A given company may perform a large or small part of this process. Fixing the place and size of the segment is an important decision.

Deciding to specialize or generalize

A food (fruit) processor may

1. Grow or buy his fruit requirements
2. Sell his output to a wholesaler, retailer or directly to consumer

The advantages of specializing and concentrating in a small segment are:

1. Less capital investment is needed
2. Management can concentrate better on small segment
3. Planning, directing and controlling are less complex

The advantages of a larger segment are

1. More control of the process
2. Less idling (time) of men and machinery
3. Greater potential of growth

The economics of decision to set up a production unit.

The decision on what segment of the total transformation process to be depends on the economics of situation. Having decided on the segment of the transformation process, one can begin to plan, obtain and install the producing unit.

Physical Facilities

The physical facilities of the firm would include building, machineries and equipments, furniture and fixtures and others. They must be designed to aid employees in producing the desired product or service at a low cost. The design function includes lay out, selection of machines and equipments and determination of features desired in the planning.

Steps in planning the physical facilities

i) Good selection and arrangement of physical facilities can pay dividends. Planning the physical facilities require the following steps.

ii) Determine the goods and services to be produced and performed.

Break the product or services into parts, operations and activities. Parts are the divisions of the product that, when assembled form output. Some outputs have only one part while others may have many. Operations are the steps or segments of work performed to accomplish the conversion of inputs into outputs. Activities such as moving raw materials are necessary for the performance of operations. Non-activities including delays are caused by imbalance of times of the operation. Activities and non-activities may not be identified fully until the final lay out planning is done. The number and extent of non-activities should be minimized.

iii) Determine the time to perform operations

Each operation required to produce a good or perform service consumes the time of work of machines and personnel. The total time includes the time to perform the operation plus time for unavoidable delays and personnel needs. The time of work determines the number of machines and the number of people needed to perform the work and speed of conveyors.

iv) Estimate the number of machines and workers needed

Knowing the time that a machine takes to perform an operation on a product, and knowing the planned production, the number of machines needed can be determined.

v) Decide the best arrangement for the sequence of operations

The operations management has to ensure the least movement of product and people. However, people and machines should not be idle and space available should not be wasted. The plant can be planned according to either or a combination of both of the following two types of layout.

- a. Product or Service layout.
- b. Processor or Function lay out

a) **The product layout** places machines or serving units in such a way that the product moves along a line as it passes through the sequence of operations. Materials and people move forward from operation to operation with little back tracking.

Advantages

1. Specialization of workers and machines
2. Less inventory
3. Fewer instructions and control
4. Faster movement
5. Less space for storage

b) **The process layout** is based on keeping machines and workers busy thus idle time is reduced to a minimum. Machines performing the same type of work and workers with similar skill are grouped together.

Advantages

1. It has flexibility to take care of change
2. It uses general-purpose machines and equipment
3. Efficient use of machines and personnel
4. Few layouts are combination of both to take advantage of the situation. Decreasing inventory compensates idle time created by differing production.
5. Determine the general layout
6. Plan the detailed layout for efficiency and effectiveness

Some specific matters that the manager should include in the final layout planning are:

- a) Space for movement
- b) Utilities
- c) Supply of equipments
- d) Safety
- e) Working conditions
- f) Cleanliness and maintenance
- g) Product quality

Implementing the plan

The first step in implementing the plan is to test it see whether it is sound (working well). There are many ways to do this. One method is to have employees or other persons who can give some experienced opinions – review of the plans and suggestions. Another method is to stimulate the process by moving templates or models of the goods or people through the process so that their movements can be analyzed. Some mishaps can be deliberately included to see what happens. The actual implementation of the plan will depend on whether it is a brand new venture, a layout for an existing building or rearrangement of the present layout.

Designing and controlling work

The planning and control process is a communication system designed to convey to employees what, how, where, who, when and why the work is to be done.

1. Work design

After the layout of the plant, plan for the movement of materials. Steps involved in work design and improvement are:

- a) State the problem
- b) State the functions
- c) Collect the information
- d) List alternatives
- e) Formulate, review and test the selected changes
- f) Install and follow up changes

2. Work measurement

Physical work can be measured more precisely than mental work but it still requires judgment. The time to perform can be divided into i) time to perform the work and ii) time for personal needs and irregular activities.

The methods used to determine time to perform the work are:

- i) Estimates by people experienced in the work
- ii) Time study, using a watch or timing device

Adding time for personal needs

Personal and irregular time allowances are added to normal time to obtain the total time in which operation should be performed under normal conditions. Time for use of rest rooms, poor working conditions and fatigue are some allowances of personal needs.

3. Planning

The optimum plan from a production standpoint is to maintain a constant level of production to its capacity for both machine and person of one product, with inputs needed arriving and outputs taken by customers as and when they are finished.

4. Scheduling the time for work to be done

Orders are scheduled into production

- a) On a preplanned schedule
- b) When inventory is reduced to a certain low level
- c) When orders are received and inventory is not available.

Schedules set the times to produce specified goods. The scheduling can be done by one of the following methods.

- 1) Sending orders into the shop in sequence. The shop processes the job through operation on a first come first served basis.
- 2) Setting priorities and processing orders accordingly. Rush orders which have top priority.
- 3) Using either (i) or (ii) for each operation.
- 4) Setting a specific time for each operation and for each job.

Controlling production: Quantity and quality

If no control is expressed over operations the process will fail. The principle of exception should be followed. Controlling by exceptions involves comparing the plans with the plant's performance. In simple systems, this comparison can be made informally by personally observing performance. Orders may be filed by due date, work to be completed in each department may be recorded each day or bar charts may be used. The record is obtained through feedback or by having forms returned with information on work performed. Changes may not be done when performance equals or exceeds the plans. An exception arises when performance does not reach the level desired. Then the operations manager has to decide what to do to improve future performance.

The methods used in quality control have been developed further than those for other control systems and are used in many other systems, including cost control. The system begins with setting the level of quality desired. The quality level is based on:

- 1) The value of quality to the customer
- 2) The cost of the quality.

Then controls should be established to obtain that quality. The cost will increase, if an attempt is made to exceed that level of quality. At the same time, if quality is allowed to go below the level, then the firm will lose its customers.

Steps needed in any system of control are:

1. Set standards for your quality range.
2. Measure your actual performance.
3. Compare performance with standards.
4. Make corrections when needed.

Standards of quality may be set for dimension, colour, odour/flavour, strength, content weight, service and other characteristics.

ISO Standards

The World Trade Organization's agreement on technical barriers to trade emphasizes the vital role laid by International Standards in providing the technical foundation for global markets.

When this is done, conflicts are minimized and agreements are more. On this occasion it may be worthwhile to review the development of the new version of ISO 9000 Standards for Quality Management Systems, which have now become so essential for acceptance of products and services at the International level.

The ISO 9000 Standards originally evolved for Quality Management Systems for manufacturing units. The same formulation was then extended to service and software fields. There has been a need felt over the years for a generic system which is all comprehensive and at the same time easily applicable to the business of the user, whether it be in manufacturing or service or software fields. Also in the meantime the environment management standards have come in. Taking into account all this and the fact that the ISO 9000 Standards were last revised in 1994, ISO's Technical Committee TC 176 had taken up the task of bringing out "Year 2000" revision. This is expected to be announced at the end of year 2000, though by now the finalized draft has been circulated which contains all the essential features.

The changes

The current ISO 9000 family of Standards contains over 20 Standards and documents. The year 2000 ISO 9000 Quality Management Standards (QMS) on the other hand will have only three primary standards, which are

1. ISO 9000 Quality Management Systems - **Fundamentals and vocabulary**
2. ISO 9001 - Quality Management Systems - **Requirements**
3. ISO 9004 - Quality Management Systems - **Guidance for Performance Improvement**

The current ISO 9001, ISO 9002 and ISO 9003 Standards will be consolidated into a single ISO 9001 Standards. A reduction of scope of the ISO 9001 requirements will be permitted to omit clauses that do not apply to a particular organization. In addition to the three core standards, ISO 10011, the auditing standard will be consolidated with the ISO 14010, ISO 14011 and ISO 14012 environmental auditing standards.

Principles of revision

The principles driving the revision process are:

1. Applicability to all product and service sectors and to all sizes of organizations,
2. Simplicity to use, clear in language, readily translatable and easily understandable,
3. Ability to connect Quality Management Systems to organizational processes,
4. Provision of a natural stepping-stone towards performance improvement,
5. Greater orientation toward continual improvement and customer satisfaction,
6. Compatibility with other management systems, such as ISO 14000, for Environmental Management,
7. Need to provide a consistent basis and address the primary needs and interests of organizations in specific sectors such as aerospace, automotive, medical devices, telecommunications and others.

Process Model: The revision of the ISO 9000 QMS makes a radical change and repositions the 20 elements of the current ISO 9001 into four parts.

1. Management responsibility
2. Resource Management
3. Product and/or Service realization
4. Measurement, analysis and improvement

The process model is similar to the well-known Deming's PDCA (Plan, Do, Check and Act) cycle of quality improvement. This kind of a structuring permits the applicability of this model to any business or service. The concept of continuous improvement is intended to stimulate the efficiency of the organization, to increase its competitive advantage in the market and better respond to customers' needs and expectations.

Another new item that has been addressed is the measurements to evaluate customer satisfaction, providing key information for continuous improvement.

In terms of resources, attention has been given for the need to provide and make available all necessary resources, which will now include elements such as information, communication, infrastructures and work environment protection.

Changes have also occurred in terminology. Now the more natural term "organization" is used instead of "supplier" in the old standard. The expression "product and service" is used instead of only "product" as was in the old standard. These changes are friendlier with the normal use and meaning of the words. Also compatibility with ISO 14001 environmental standards is sought to be achieved through informative annexes correlating the clauses.

Transition

There is an ISO document on Transition Planning Guidance to help the change over. Further authentic information regarding revision can be obtained from the Bureau of Indian Standards (BIS), which has played a leading role in the deliberations of the ISO's Technical Committee. Since the new standards are integration and simplification of the older one, transition should be easy and also there is sufficient time given for the process.

The process model is well suited to really focus on the needs of customers and if genuinely implemented should help the growth of business. In fact this is the real essence of the change over. While the past standard no doubt implied this, there was no explicit requirement to measure customer satisfaction and initiate continuous improvements. On the other hand, in the new standard these are explicit and essential part of the elements. Also they include other interested parties (suppliers, owners, employees and society) under management responsibility.

Over 5,000 firms in India are estimated to have obtained ISO 9000 Certification so far. It is no more a luxury but has been considered commonplace for achieving standards of product or service. There has also been the unfortunate side, namely the creeping in of the "certificate culture". Once the certification is obtained, organizations tend to be complacent and do not effect continuous improvement. What the customer needs is not a certificate to be shown to him but provision of an improved product and service, which is by itself the best certificate that any organization can get. This has been the secret of the Japanese and Korean success. The new standards will help simplify the procedural part and invigorate the commitments of organizations to continuously provide better products and services to their customers.

Hazard Analysis Critical Control Point (HACCP)

Since its introduction in the early 1970's, HACCP system is a cost effective management tool for food safety assurance that can be applied to all sections of the food chain from primary production to processing, manufacturing, distribution and retails to the point of consumption. The WTO and Sanitary and Phytosanitary Measures (SPS) agreements emphasize that food safety standards be based on scientific principles as they relate to risk assessment. Currently, the emphasis by organizations like Bureau of Indian Standards is to issue certification on HACCP, which will enhance the marketability of Indian food products, like meat, poultry, vegetables, sea foods and processed foods in the global market. Training programmes need to be conducted to increase the awareness of HACCP among the food managers, which could also help in achieving certification.

Food safety is a social responsibility and its achievement can only be possible with the active participation of all segments, *viz*, the producer, the processor, the consumer and the government.

Farm operations

The greatest amount of attention that needs to be paid is to the observance of hygienic and sanitary practices in various farm operations. Inadequate consideration given to potential hazards at the farm level is often responsible for making subsequent correction of the problems unnecessarily expensive or in some cases rendering them insoluble. Some of the typical problems and the foods in which they are encountered are pesticide residues in fruits, vegetables, egg and milk; pathogens in fruits, vegetables, spices, poultry and sea food; insects in fruits, vegetables, spices; high microbial load in most fresh produce, milk, meat and poultry; mycotoxins in cereals, oilseeds and milk. Almost all these problems can be effectively overcome by adherence to farm practices.

Total Quality Management (TQM)

ISO 9000 deals with the process. Total Quality management is about people. TQM link quality to customer satisfaction by acting on four aspects – customer requirements, management commitment, total company wide participation and systematic analysis of quality problems. TQM provides the overall concept that fosters continuous improvement. TQM philosophy stresses a systematic, integrated, consistent, organization wide perspective, involving every one and every thing in an organization. ISO is a milestone in TQM journey.

Core concepts for TQM are

- 1) Customer satisfaction - Be customer focused.
- 2) Internal customers are real.
- 3) All work is process. Make it a good place to work, create a work culture, which will lead to satisfied customers.
- 4) Measurement – measure the work.
- 5) Teamwork – Top management must be involved.
- 6) People make quality – Do it right first time, quality is an attitude, empowering.
- 7) Continuous improvement cycle.
- 8) Prevention.

9. MATERIALS MANAGEMENT

It deals with purchasing and controlling the materials used in the production process.

1. Materials (goods) planning and control

Decisions to be taken in this are:

- a) Amount of materials needed for output desired
- b) Amount of inventory and its storage and recording
- c) Vendor relations
- d) Quality materials and price per unit
- e) Quantity and time of order
- f) Methods of receiving and transporting
- g) Handling of defective materials and stock

Policies and procedures should be established so that most of these decisions become routine in nature. When exceptions occur, the concerned authority should correct them.

Materials are a form of investment and until they are sold and produce revenue, the money cannot be used for other income producing purposes. Consequently, the manager wants to buy (the materials) in small quantities and sell the output rapidly in order to obtain income. But, if quantities are too small, the income producing opportunities may be lost and customers may be missed. Also, purchasing in small quantities usually results in higher prices. The losses due to theft should be kept minimum. While increasing controls may reduce cost from losses, it also increases the controlling cost. The problem is to find the balance between these two costs.

2. Inventory control of raw materials.

The use of inventory is to take care of seasonal variations in demand. The inventory of materials, parts, goods and supplies represent a high investment in all business. Many companies failed because their inventories locked up too much money or the items in inventory become obsolete, impaired or lost. The purpose of inventory is to disconnect one segment of a process from another, so that each segment can operate at its optimum level of performance.

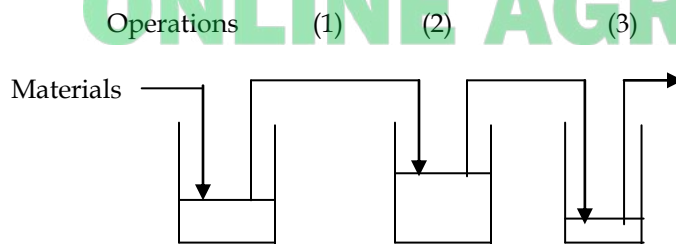


Fig.9.1 Inventory between different operations

Types of Inventories

- a) Purchased materials, parts, products
- b) Goods in process or between operations
- c) Finished goods at the factory, warehouse or store
- d) Repair parts for machines
- e) Supplies for the office, shop or factory
- f) Tools

Each of these types of inventory is performing basically the same function and can be studied in the same way. Some of the inventories represent a much greater investment, cause more serious trouble if the items are not in stock and are more costly to restock than others.

Determining Economic Inventory Level

The detailed analysis made to determine economical inventory level must consider total inventory should not be so great that it make it difficult to pay current bills in cash. The Fig 8.2 shows how the number of units of a purchased item varies over a period of time. When a purchased item is received the inventory increases instantly. The units are removed from inventory, as they are demanded. At certain levels or when inventory falls to a specific level, a purchase order is sent to the vendor. The order will be received sometime later. In the meantime, more units may be drawn from inventory. This cycle is repeated for each item purchased.

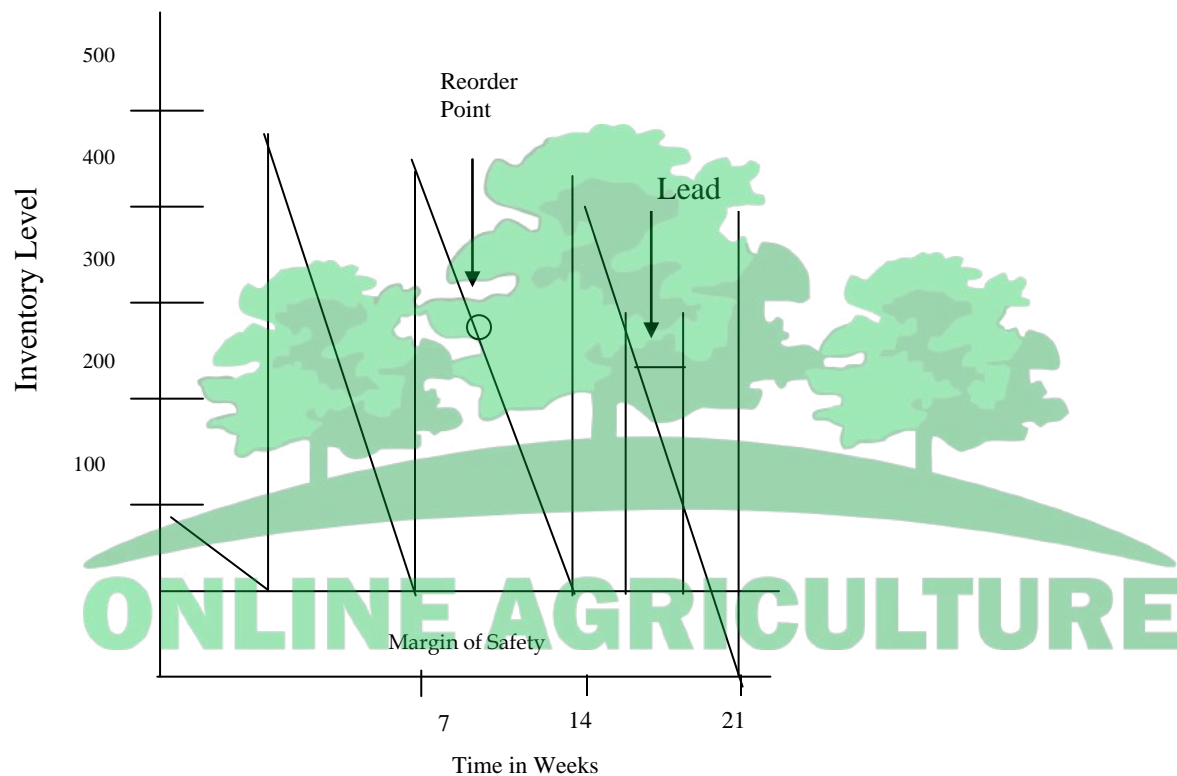


Fig 9 2 Graph of Changing Level of Inventory of an

For items in process and in finished goods, the inventory builds up over a period of time as goods are produced so that the vertical line in the figure will be sloping upwards to the right. The inventory builds up because production is greater than demand. Too little inventory may cause stock-outs (shortage of the material or product when it is required for production or sale). The problem is to strike the optimum inventory to carry converted in terms of Economic Order Quantity (EOQ) for consumption materials and economic lot size for batch production.

The variables are

- a) Annual requirement of the item (c)
- b) Ordering cost (s)
- c) Inventory carrying cost per unit (I)

The model is given by the equation,

$$EOQ = \sqrt{\frac{2cs}{I}}$$

Uses of the model

The model is an excellent guide in scientific inventory management. This compels the manager to analyze the requirements and cost of inventory holding. It is useful in the inventory management by fixing.

- 1) Maximum and minimum level of stock holding.
- 2) Ordering level I (that is, the stock point when reordering is required, and
- 3) The most economic quantity to order.

The above is a simple and deterministic model, which assumes constant rate of consumption, constant cost of ordering and holding inventory and uniform lead - time (that is, the time lag between replenishment, action and actual supply or availability of the items)



3. Determining when to order

The level of inventory at which an order should be issued is based on:

- 1) The quantity to be used between times an order is issued and items are received.
- 2) A quantity needed to provide a margin of safety.

The time to be allowed in (1) is determined by the time taken for

- a) Order to be processed by the firm
- b) Order to be transported to the vendor
- c) Vendor to make and pack the items
- d) Items to be transported to the firm

Estimates of cost of carrying inventory ranges from 15% to over 100% of the average inventory investment for a year. Values of 20% to 25 % are often used. The recording point quantity can be estimated by computing various levels and reordering points and adding the cost of carrying the inventory and cost of running out of goods multiplied by the probability of running out. The lowest cost is the best order point.

4. Quantity Per Order

The quantity per order affects the level of inventory and the time between orders. Orders may be placed. At certain intervals such as once in a week, a month or quarter, when the amount ordered can bring the level of inventory up to a predetermined standard amount. When the inventory reaches a certain quantity.

5. Ordering Procedure

Many items can be ordered on a routine basis. The procedure starts with need as reflected by the reorder points and requires keeping a

- a) Perpetual inventory which records when the inventory has reached the reorder point.
- b) Quantities set aside that will not be used without making out a purchase order.

Items requiring special analysis

- a) Expected changes in price, short delays in buying for expected decrease in price or increased quantities for expected increase in price result in savings. However, stock - outs or too heavy inventory costs should be guarded against.
- b) Expected changes in demand. Seasonal products fall into this category.
- c) Orders for a demand for special goods, quantity ordered is equal to amount demanded so that no material is left over.
- d) Short supply of materials.

Speculative buying should be avoided unless the manager is in that business.

Placing responsibility of ordering

One person should have the responsibility for ordering all materials but that person should obtain the help of those knowledgeable people in the area where the goods are needed. By having a single person responsible, duplicate orders for the same material are avoided, the specialized skills needed for purchasing can be used and the responsibility for improvements in buying - process is established.

6. Sources of Supply

This is important because,

- a) Price of purchased goods is a major cost in the production
- b) Reliability in delivery and quality affects the operations
- c) Vendor can be valuable source of information
- d) Vendor can provide valuable service

Prices of materials

The prices of materials from different vendors are not the same. Higher prices may be charged for

- a) Higher quality
- b) More reliable and faster service
- c) Better terms for returning goods
- d) More services such as packaging and information
- e) Better or delayed payment plan
 - The purchase manager can purchase an item at a lower price, but the total cost of processing the item may be higher.
 - Price and transport cost from a distance place may be less than from a local source but faster service from local source may allow the purchasing firm to have less inventory.
 - One source may supply a wide range of goods needed so that the expenses of ordering from many sources can be reduced.

The sources of supply may be brokers, wholesalers, manufacturer or others. Each of these sources provides a valuable service. **Wholesaler** stocks many items, quick delivery of wide varieties of items. **Manufacturer** does not involve intermediate handler, but it is restricted to a product it can supply. Manufacturer may have sales representatives or agents who can help small business. Regional and National Trade Fairs and Trade Association provide valuable information on sources and their products and services.

Using few or many sources

Arguments for a single source

- a) A closer and more individual relationship can be established
- b) Better services during shortages
- c) Discounts for large purchase

Multiple sources provide a greater variety of goods and often on better terms. Care should be exercised on ethics of supplier and should be guarded against including gifts, entertainment, misrepresentation and reciprocity. A small company should try to maintain a good image in its dealings with vendors in order to obtain good services.

7. Receiving Materials

The receipt and forwarding of materials to inventory constitute the last step in acquiring inputs.

- Checking whether the material is in conformity with order, proper condition and quality.
- Materials are checked for damage in transport, for specified characters such as colour, size and items specified and for proper quantity and price.
- Materials can be stored in the containers in which they are received, in separate containers or by individual item. The receiving agent prepares material for storing.

10. MARKETING MANAGEMENT

Marketing management refers to distribution of the firm's product or service to the customers in order to satisfy their needs and to accomplish the firm's objectives.

Marketing includes developing the product or service, pricing, distribution, advertisement, merchandising, doing personal selling, promoting and directing sales and service to customers.

Marketing is an essential function because unless the firm has a market, or can develop a market, for its product or service, other functions of staffing, producing and financing are futile.



Developing Marketing Strategies

Fig.5.1 Schematic View of Marketing Functions

the importance of customers to a firm. those needs can be satisfied.

- c) Decide what advantage that will give a competitive edge over other firms.
- Meeting customer's needs
 - Learning customer's needs
 - Conscious about the firm's image
 - Looking for danger signals

Market Segmentation

A market should be defined in terms of various characteristics such as economic status, age, education, occupation and location. The best opportunity is to identify a market segment that is not well served by other firms. In determining the firm's market segment, the fundamental aspects to be considered are:

- What is the place of the firm in the industry and how it can compete with others?
- Whether the firm is known for its quality or price.
- Image of the firm among the customers.
- If the firm has limited number of customers the reasons for it.

A common error found in many retailing firms is 'straddling the market' or attempting to sell both high quality and low quality goods. As a result, the retailer has a limited inventory of everything but does not have a good selection of anything. In sum, the firm should assess its share in the market. This perception is possible only when the firm stresses quality, reliability, integrity and service rather than low prices.

Strategic Marketing Policies

Formulation of strategic marketing policies for certain areas would consider:

- 1) Morality and public service
- 2) Product
- 3) Market
- 4) Profit
- 5) Personal Selling
- 6) Customer relations
- 7) Promotion
- 8) Credit Policies
- 9) Use of Credit card

1) Morality and Public Service

Policies on morality and public service consist of general statements expressing your firm's desire to be honest in its dealings with public and its customers.

2) Product

The small firm often finds its most effective competitive weapon in the field of product strategy. It may concentrate on narrow product line, develop a highly specialized product service or provide a product service - 'package' containing an unusual amount of service. Competitor's products, prices and services should be examined to determine whether the firm can build a better product.

3) Market

Market policies are designed to clarify with geographic areas the firm wishes to serve and other marketing characteristics appropriate for the firm.

4) Profit

Profit policies may require that sales goals be specified that will provide the firm a sufficiently large sales volume or profit as percentage of sales may be specified which calls for low marketing costs.

5) Personal Selling

Personal selling policies may range those guiding the structure of the firm's sales organization to those covering the sales representative's behaviour.

6) Customer Relations

The firm's relationship with its customers may be indicated with a question? Should the firm have a policy that customer is always right?

7) Promotion

The pattern of the firm's advertisement may reveal the firm's promotion policies. The firm should follow a policy of tasteful advertising at all times. Sales promotion may be restricted to trade shows or to industrial publications or to some other advertising media.

8) Credit Policies

In order to stimulate sales, customer should be provided with credit. However, an appropriate credit policy is essential to be successful in granting credit.

9) Use of Credit Cards

Now a days plastic credit cards are being used by many of the people, hence the sales against credit cards will attract middle income to high-income customers as customers in retail stores.

Approaches to Marketing Strategies - What to do?

Marketing strategy refers to how firm meets the needs of the market better than its competitors. There are really two problems involved, namely, determining available strategies and choosing the one to be used by the firm.

Available Marketing Strategies

- 1) Analyze present and future market situation
- 2) Shape the product to suit the market
- 3) Evaluate the company's resources
- 4) Keep informed about the competitors

How to do Marketing Strategies

This is also called Means of Strategies and it includes:

1. Market research and sales forecasting
2. Pricing the product or service
3. Determining the channels of distribution
4. Conducting advertising, merchandising and sales promotion.

1. Market Research and Sales Forecasting

Areas to be considered are:

- a) Identification of customers for the product or service of the firm
- b) Determination of customers needs
- c) Evaluation of sales potential for the firm
- d) Indexing of sales potential in the firm's trading area

Steps in Market Research

- a) Recognition of a problem
- b) Preliminary investigation and planning
- c) Gathering factual information
- d) Classifying and interpreting the information
- e) Reaching a conclusion

Sources of Marketing Information

Secondary Sources of Published Data: Secondary sources contain data originally compiled and published elsewhere e.g. Business India.

Primary Source of Published Data: A primary source of published data consists of compilation and initial publication of data e.g. Census report.

Primary Source of Unpublished Data: Firm's records, external data collected from dealers, customers and competitors.

2. Pricing the Product or Service

One half of the failures in small business can be traced to a product or service that was being sold at the wrong price.

Relating Price to Costs: All items should be priced at a level to provide an adequate profit margin.

Setting a Price Strategy

The firm's goal should be to find the price – volume combination that will maximize profits. The product, price, delivery, service and fulfillment of psychological needs form the total package that the customer buys. The price should indicate the product image.

Price cutting: It should be considered as a form of sales promotion. Price cutting will be useful wherever the added sales resulting from price-cutting offsets the added cost. However, in case of inelastic demand price – cut will not increase sales.

Other Aspects of Pricing

i) Mark – up Pricing: An initial mark- up price should cover operating, particularly selling expenses, operating profit, and subsequent price reduction. An initial mark- up may be expressed as a percentage of sales price or product cost. Mark – up price is needed to meet competitor's prices and promotional activities.

ii) Price Lining refers to offering of merchandise at distinct price levels. Shirts sold at Rs.50, Rs.75, and Rs.100 etc. Income level and buyer's desires of a store's customers are important factors. Advantages of price lining are the simplification of customer's choice and reduction of the store's minimum inventory.

iii) Odd Pricing: small businesses managers believe customers will react more favourably to prices ending in odd numbers. E.g. Rs.13, Rs.15, Beta prices- Rs. 179.95, Rs. 499.95.

3. Determining Channels of Distribution

A marketing channel is the pipeline through which a product flows on its way to its ultimate consumer.

- a) **Design own channel of distribution:** Channels should be tailor- -made to meet its needs of firm. New products commonly require different distribution channels from those needed for products, which are well established and widely accepted.
- b) **Avoid multiple channels:** Multiple distribution channels sometimes create conflicts. Distribution will be adversely affected unless these conflicts are resolved.
- c) **When to change the channel:** Change in buyer's location may dictate a change in marketing channels. Changes in concentration of buyers may also require a change in marketing channels.

4. Advertising, Merchandising and Sales Promotion

Advertising is used to inform the customers of the availability of the firm's products or service and the uses they can make of them, and to convince customers that the firm's products are superior to its competitor's products. In order to be successful, advertising should be based on the firm's capability to provide quality workmanship and efficient service. It should be closely related to changes in customer's needs and desires.

Merchandising and Sales Promotion

Merchandising denotes the promotional efforts made for a product or service in retailing firms, especially at the point of purchase. It includes window displays, banners, shelf stickers, the label and package of the product, product demonstration, giving samples and special price offer.

Sales promotion consists of activities that have the purpose of making other sales efforts (e.g. advertisement) more effective. Some other popular sales promotion techniques are:

- a) Special displays
- b) Offering premium
- c) Running contest
- d) Distribution of free samples
- e) Offering free introductory services
- f) Demonstrating products

In spite of all efforts spent in doing market research, sales forecasting and advertising and sales promotion, some one ultimately must do some personal selling of products or services.

Selling through Agent Middlemen

- a) **Broker:** A broker represents either the buyer or usually, the seller for negotiating packages or sales without physically handling the goods. A broker possesses only limited authority in setting prices and terms of sales. After the sale is over, the seller ships the goods directly to buyer and the broker receives commission.
- b) **Selling Agent:** The selling agents perform on the basis of an extended contracts and negotiates all sales of a specialized line of merchandise or the manufacturer's entire output. Usually, the agent has full authority concerning prices and terms and is the sole seller for the line represented and is not given market area.
- c) **Manufacturer's Agent:** the manufacturer's agent or representatives is an independent business person who sell a part of output of two or more client manufacturers whose products are related but non-competing, on a continuous or contractual basis in a limited or exclusive territory. Manufacturers use agents more often than any other type of agent middlemen. The agents do not take title to the goods, are paid a commission and have little or no control over prices, credit or other terms of sales.
- d) **Firm's Sales Representative:** Sales are effected through the firm's own sales representative.

The Marketing Mix

In considering the needs of their customers, companies must think in terms of the *product* itself, the *price* of the product and the *place* where the customers needs it, while making sure that the existence of the product is known through effective *promotion*. These various components are described in more detail below

Product

The product is the focus of marketing. Although many aspects of the product are not marketing responsibilities (such as production and processing), marketing is concerned with the product's attributes and what these mean to the customer. Such factors include quality, appearance and performance.

Price

Price creates sales revenue and is therefore important in determining the total value of the sales made. Price is really determined by what customers perceive as the value of a commodity or service. It is important to understand how customers value commodity or service as well as how much they are prepared to pay in relation to the benefit they expect to earn.

Place

The place factor deals with the various methods of transporting and storing commodities and then making them available to the customer. Getting the product to the right place at the right time depends on the distribution system. The choice of distribution method will depend on market circumstances and the nature of both the commodity and the customer.



Promotion

Promotion is the business of communicating with and influencing the customer. Although the cost associated with promotion can be a significant element in the overall cost of a product, successful product promotion increases sales so that costs are spread over a larger output. While increased promotional activity may be a response to competitor activity or a new product launch, it is important to maintain a constant flow of messages to the consumer as well as visibility in the market place.

Mix

Mix is an appropriate word to describe the marketing process, as it is a blending of ingredients to fulfill a common purpose. Each ingredient is vitally important and each depends upon the other for its contribution. Different markets will require a different balance of ingredients. The mix should comprise:

A time scale

A company must have a plan, which indicates when it expects to achieve its objectives, both in the short, medium and long term

Strategic elements

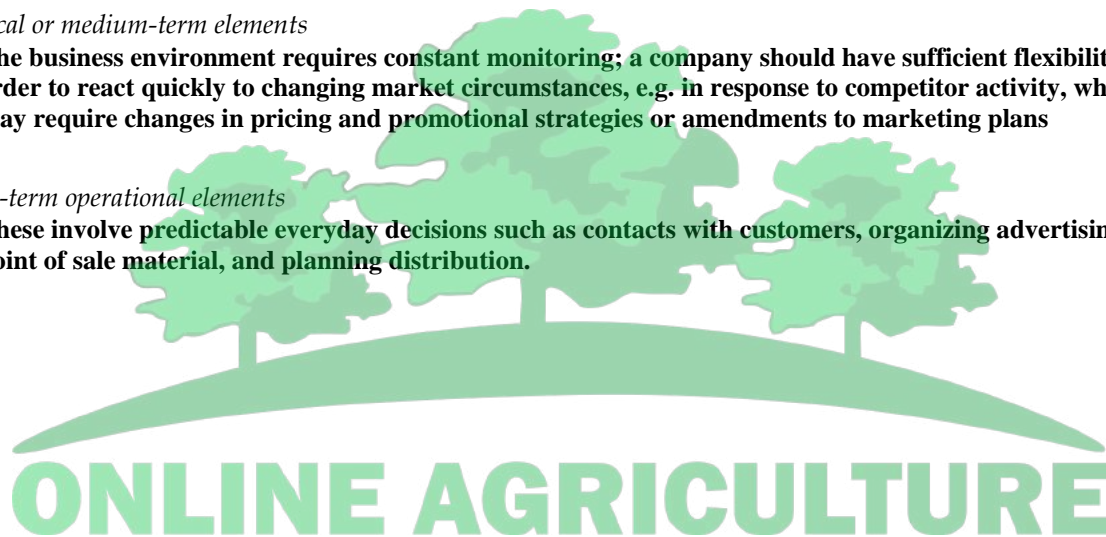
These will involve the overall development strategy of the company and require considerable judgment and expertise; such decisions might involve the development of a new product range or a new distribution system

Tactical or medium-term elements

The business environment requires constant monitoring; a company should have sufficient flexibility in order to react quickly to changing market circumstances, e.g. in response to competitor activity, which may require changes in pricing and promotional strategies or amendments to marketing plans

Short-term operational elements

These involve predictable everyday decisions such as contacts with customers, organizing advertising and point of sale material, and planning distribution.



11. PERSONNEL MANAGEMENT

Every small business manager is a personnel manager in the sense that work is done through people, with people and for the people. Consequently, the owner manager should be personally capable of handling employee relations until the company becomes large enough to afford a personnel manager. Planning personnel requirement, developing sources from which new employees can be recruited, choosing (recruiting) the needed people, training and developing them into productive workers, evaluating their performance, compensating them and dealing with various personnel relationship, including industrial relation.

Staffing

Staffing is a critical function of organizing and managing a successful business. All companies, whether large or small, are involved in the staffing process. All businesses run the same risk every time they hire a new employee. The staffing function is generally divided into four major categories (1) staffing needs, (2) acquisition, (3) motivation, and (4) retention.

Planning Personnel Requirements

As both quantity and quality of work force are important, personnel planning should be complete and detailed, but flexible and updated at least half-yearly. The following statement is frequently made that one should organize around 'what is to be done' rather than 'who is to do it'.

Job specification are written statements covering duties, authority, responsibility and working conditions of the job and of qualifications required for a person to perform the job successfully. The use of job specification will help the manager to match the person to the job to be filled up.

Finding new employees

There are two basic sources, one from the firm through promotion, upgrading or transfer; and the other from outside the company through recruitment and selection. More specifically, there are four sources usually used by managers of independent business. They are:

1. Qualified people from within the organization
2. Personnel from competing firms in the industry
3. Organization outside the industry
4. Educational institutions

There should be a balanced policy of promotion from within and recruitment from outside when the need arises.

Filling jobs from within the firm

There are three methods of securing employees internally; upgrading the employees' holding position, promoting an employee from a lower level job and transferring an employee from a similar position elsewhere in the organization. The **advantage** is the concerned person's capabilities are strengthened and their morale is built up. The **disadvantage** is non-availability of capable person, possibility of inbreeding development.

Recruitment

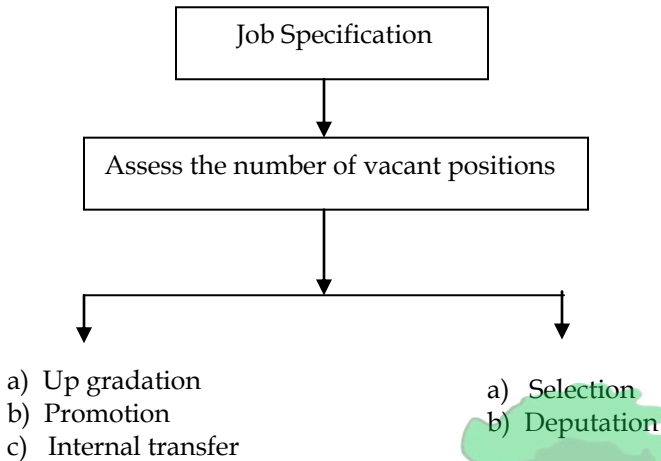
To recruit means to obtain fresh supplies or restore and replenish. Recruitment may be described as an activity that aims to bring job seekers (applicant) and job giver (employer) in contact with one another.

Selection

Selection of candidates begins after completion of recruitment process. In other words, the process of selection begins only after an adequate number of applications have been secured through different sources of recruitment - internal and or external. Selection involves a careful screening and testing of candidates who have put in their applications for any job in the enterprise. This is necessary for two reasons, first, many of the applicants may not really be suitable for employment in the enterprise, secondly, even where applicants are duly qualified and experienced, the enterprise, secondly, even where

applicants are duly qualified and experienced, the enterprise may not have adequate number of vacancies to accommodate all of them.

Recruitment and Selection



Reasons for using external sources

- At least lower level jobs be recruited from outside.
- New blood is to be infused into an organization to prevent inbreeding, conformity and stagnation.
- Mechanization and automation requires new skilled workers.

External sources

1. Former employees
2. Friends and relatives of employees
3. Personal application received in person or through mail
4. Competing firms
5. Labour organization
6. Employment agencies either public or private
7. Educational institutions
8. Leased manpower- deputation
9. Paper advertisement
10. **Job posting:** Posting available job opportunities on a notice board to give present employees a chance to bid for them.

Selection procedure involves two things, namely, recruiting or attracting a group of employees, then selecting the needed person.

Recruiting new employees

- 1) Campus selection
- 2) Advertising using trade journals, newspaper, radio, Television, bill boards, window displays etc.
- 3) Private and public employment agencies
- 4) Employee referrals

Selecting employees for a given job

Mistakes in selecting and placing personnel in the firm can be greatly reduced, if an orderly and systematic procedure for choosing the right person is used. One such procedure for effective filling up of position is given below.

1. Reviewing the job specification for the position.
2. Considering the present employees for one of them may be able to perform the job acceptably or become qualified if his abilities are upgraded.
3. Looking outside the company and recruit applicants if none of the present employees can fill up the job.

4. Using an application bank gathering information from applicants.
5. Preparing for the interviews with applicants by using the points to be covered.
6. Conducting interview.
7. Using psychological tests to determine the applicant's knowledge, skills and attitudes.
8. Check on qualified applicants with their employers.
9. Arrange for the applicant to take physical examination.
10. Decide whether the applicant should be hired on trial basis.
11. Conduct an orientation programme for new employee.
12. Decide whether the employee should be retained after a pre-arranged probationary period.

The personnel development may be defined as an attempt to increase employee's productive capacity up to highest level of the job to be performed.

Need for training

Not only new employees be trained, but also the present employees must be trained in order to adjust to rapidly changing job requirements. This would result in increased productivity, less supervision and higher morale.

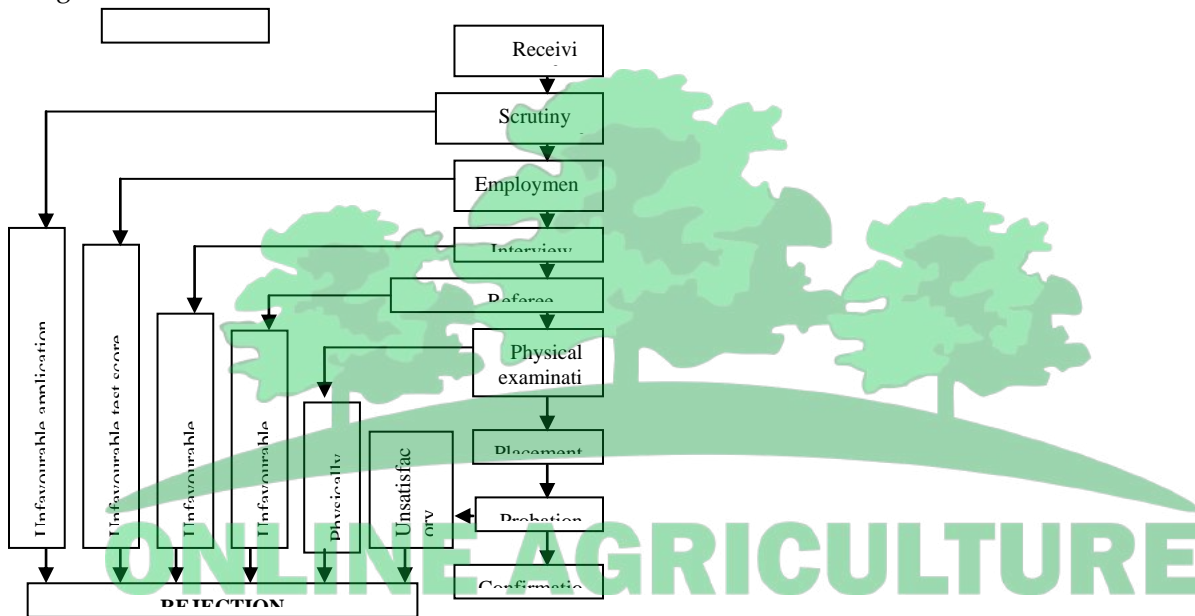


Fig. 11.1 Recruitment and Selection

Methods of training

Various methods of training to non-managerial employees are

1. On the job training
2. Apprenticeship
3. Internship
4. Outside Training

On the job training is a programme in which employees get training while they perform their jobs. Thus, they are both producers and learners.

The purpose of **apprenticeship** training is to develop well trained individuals who are capable of performing a variety of jobs. It involves learning a variety of skills that when combined, qualify one to practice a trade. The programme is usually a long – term process covering from two to seven years and a union is often involved in administering it.

Internship training is a combination of school and on the job training. It is usually used with employees who are aspiring for marketing or clerical positions or who are being prepared for management positions.

In the **outside training**, the employees receive training at schools outside the company. Usually the company reimburses the employees for all or part of their tuition expenses.

Performance Appraisal

Performance appraisal is a form of counseling and coaching employees. Performance appraisal is the process by which owners gather information about each employee's performance effectiveness and communicate this information to them. Evaluating employee performance is essential if managers wish to help their employees raise their level of performance. In the small business, Managers do not spend much time on employee appraisal because they are usually occupied with the daily matters of trying to get the product or service to the customer.

Performance appraisal includes (1) establishing standards, (2) recording performance, (3) reviewing performance in accordance with standards, and (4) taking corrective action where and when necessary.

Employee's performance in the small business is evaluated daily by owners on an informal basis while working directly with employees. However, there should be a regular schedule for performance reviews, such as once or twice a year. When the company is small, the owner- manager does the evaluation. However, as the company grows, the employees should be evaluated by their immediate supervisor and owner. These appraisals enable the owner to chart employees' progress and suggest areas that need improvement. The following guidelines are recommended for anyone conducting performance reviews.

1. Decide in advance on the purpose of your performance reviews; evaluation, criticism, training, coaching, morale building.
2. Don't wait until the review occurs to let your staff know what you expect from them. Tell them early on exactly what the job requires; what specific goals, standards, and deadlines, you expect them to meet; and how you plan to evaluate and reward their performance.
3. Keep a written record of your subordinates' performance throughout the year so that you can cite specific examples to back up any criticisms or comments you make during the review.
4. The review should not be a one - way process. Let the employees participate, and listen to what they say.
5. Go over the evaluation with each employee. They don't have to agree completely with your ratings, but if they strongly disagree, they are not likely to try to improve.
6. When criticizing an employee's performance, make sure you also do some "stroking". Reinforce the good habits with praise.
7. Be specific and constructive in your criticism. Don't just tell someone (s) he is not productive enough. Tell him or her how (s) he has fallen short and what you expect in the future.

Purpose of performance appraisal

The success of performance appraisal and follow-up counseling depends on whether employees comprehend and accept the purposes of the review. By observing the guidelines listed, a number of important functions can be served by the appraisal.

1. Evaluation of performance over a specific time.
2. Motivation of employees by providing them with relevant feedback of job performance.
3. Evaluation of potential for growth and development of each employee, such as the potential for promotion to a position of more authority and responsibility.
4. Accumulation of data for decisions concerning the distribution of rewards for outstanding performance, such as merit increases.
5. Accumulation of information for decisions concerning transfers and terminations.
6. Evaluation of effectiveness of training programmes and training needs.
7. Effective method for communicating the goals of management.

The results of the appraisal should be communicated each employee. Because most people are apprehensive about any type of evaluation, the owner should create an atmosphere that will put

employees at ease throughout the counseling session. If the evaluation reveals that a worker's performance is below standard, steps are taken to improve performance, such as giving the employee additional training. If standards have been met, the employee should be recommended; if standards have been exceeded, employees should be rewarded, such as with a bonus or merit rise.



12. FINANCIAL MANAGEMENT

Financing the business

The capital of a business consists of those funds used to start and run the business. Capital may be of two types: fixed and working.

Fixed capital refers to items bought once and used for a long period of time. This includes such things as land building, fixtures and equipment.

Working capital is the type of funds, which is needed for carrying out day to day operations of the business smoothly. The management of working capital is no less important than the management of 'long term' financial investment.

Working Capital Management

Significance of working capital

Every running business needs working capital. Even a business which is fully equipped with all types of fixed assets required is sure to fail without i) adequate supply of raw materials for processing, ii) cash to pay wages, power and other costs, iii) creating a stock of finished goods to feed the market demand continuously and iv) the ability to grant credit to customers. All these require working capital. Thus working capital is the lifeblood of a business without which a business will be unable to function. No business will be able to carry on day to day activities without adequate working capital.

Components of working capital

The working capital has following components, which are in several forms of current assets. The basis for assigning value to each component is shown against each.

| Components of working capital | Basis of valuation |
|--|--------------------------------|
| Stock of cash | Purchase cost of raw materials |
| Stock of raw materials | Prime cost |
| Stock of finished goods | Cost of production |
| Value of debtors | Cost of sales or sale value |
| Miscellaneous current assets like short term investment loans and advances etc | Working expenses |

Each constituent of the working capital is valued on the basis of valuation enumerated above of the holding period estimated. The total of all such valuation becomes the total estimated working capital requirement.

Factors influencing working capital requirement

The important factors that influence the working capital requirements of business are furnished below.

1. Nature of business
2. Seasonality of operations
3. Production policy
4. Market condition
5. Conditions of supply
6. Growth and expansion
7. Price level changes
8. Manufacturing cycle

Accurate calculation of working capital

The working capital has very close relationship with day to day operations of a business. Neglecting proper assessment of working capital can therefore affect the day to day operations severely. It may lead to cash crisis and ultimately to liquidation. Inaccurate assessment of working capital may cause either under assessment or over assessment of working capital and both of them are dangerous.

Consequences of under assessment of working capital

- 1) Growth may be stunted. It may become difficult for the firm to undertake profitable projects due to non-availability of working capital.
- 2) Cash crisis may emerge due to paucity of funds.
- 3) Optimum capacity utilization of fixed assets may not be achieved due to non-availability of working capital.
- 4) The business may fail to honour its commitment in time there by adversely affecting its credibility. This situation may lead to business closure.
- 5) The business may be compelled to buy raw materials on credit and self finished goods on cash. In the process, it may end up increasing cost of purchases and reducing selling prices by offering discounts. Both these situations would affect profitability adversely.
- 6) Non-availability of stocks due to non-availability of funds may result into production stoppage.

While inadequate working capital has disastrous implications on the business, excessive working capital also has its own dangers.

Consequences of over assessment of working capital

- 1) Excess of working capital may result into unnecessary accumulation of inventories.
- 2) It may lead to excessively liberal credit items to buyers and very poor recovery system and cash management.
- 3) It may take management complacent leading to its inefficiency
- 4) The over investment in working capital makes the capital less productive and may reduce return on investment.

Planning financial needs

Planning the financial needs of a business is very important. The owner or manager needs to be able to ask the following questions.

Why do I need the money?

The general area of need for money is: (a) starting a new business, (b) inventory, (c) expansion, (d) remodeling, and (e) improving working capital.

How much money will I need?

It is important to be able to specify how much money you will need. It is advisable when doing any financing to be able to stipulate the amount of money that you will be using and to specify if it is to purchase inventory, pay salaries or wages or even to be used to purchase a new equipment.

When I will be able to repay the money?

Friends, bankers, and business associates are always interested in knowing when and how you anticipate repaying the loans. The majority of loan repayments come from sales of merchandise, inventory and payments received for services rendered.

Factors that increase loan repayments

| | | |
|--------------------|------------------|----------------------------------|
| | | → Amount borrowed increases |
| Amount of payments | → Increases when | → No. of years of loan increases |
| | | → Interest rate increases |

Where will I obtain money?

Compare the advantages and disadvantages of obtaining money from different sources in terms of interest payment and control over business.

Sourcing of capital for business

There are two major forms of financing any business; equity financing and debt financing.

Equity capital (ownership) may come from

personal savings, from partnership or by selling stock in a corporation. Equity financing involves giving up ownership to the investors of the business. It also involves dividing of the business ownership among the various investors. That is instead of repaying an investor or one is giving money to the business, the investor now becomes an owner and receives money from business primarily through dividend or profit sharing system.

- 1. Common stock.** This is the most widely used form of equity financing, and provides the greatest potential return on investment for the investor. It is important to remember that if the firm does fail, all of the creditors, and investors would be repaid before the common stockholders are repaid.
- 2. Preferred stock.** It provides a preference for stock holders during failure or bankruptcy. Preferred stockholders must be paid in full before other common stockholders are repaid. Because of this preferential treatment, the preferred stockholders receive smaller dividends or returns on investment than do common stockholders; therefore, convertible preferred stock may be used, allowing the investors to convert their preferred stock at any time in the company's future.
- 3. Convertible debentures.** This is a long-term debt that would be paid off by an investor, with the option of the investor to convert the debentures to common stock before being repaid.
- 4. Debt warranties** are similar to convertible debentures but would allow the investor or creditor the option to purchase a specified stock at a specific set price. This option to purchase is available to the investor or creditor, even after the debt has been repaid but before the warranty has expired.. This generally provides a longer time period for investment (ownership) for one providing debt financing to a corporation. That is, the debt warranty would allow someone loaning money to a business the opportunity to own part of the business even after the debt has been repaid until the time when the warranty expires.

Both debentures and debt warranties are debts and, therefore, must be paid before either common stockholders or preferred stockholders are paid in case the business fails. All four of these opportunities are good opportunities to invest in business and provide potential ownership to investors who are interested in that specific business.

Venture capital has become an increasing source of equity funds for new business ventures. Venture capital individuals or firms supply funds for a percentage ownership of the new business. This source of capital has been popular in business start-ups involving new technology.

Source of debt capital are commercial banks, co-operative banks, mutual funds, vendors, equipment manufacturers and distributors, factors, private investors, special type of finance lending institutions.

Commercial banks in India include State Bank of India and its Associate Banks, all nationalised banks and private commercial banks. Many of the commercial banks have industries branches. They provide both fixed capital and working capital with over draft facility.

Special financial institutions like

Industrial Development Bank of India

Tamil Nadu Industrial Investment Corporation

Small Industries Development Bank of India

Mutual Funds

National Bank for Agricultural And rural Development

Co-operative banks

Industrial Credit Investment and Investment Corporation of India

National Agricultural Marketing Federation of India

Export-Import Bank (Exim bank)

Vendors can be an important source of short – term credit for small business firms. Firms that sell inventories to a business usually will finance the purchase of these goods for short periods of time, usually 30 to 90 days.

Factors are financial firms that finance accounts receivable for business firms. They may either purchase or discount accounts receivable. If they discount accounts receivable, they function exactly as the commercial bank. When factors purchase accounts receivable, they make an analysis of the receipt of the accounts and pay the business firm a percentage of the total amount.

Documents required to apply for loan

Bankers generally look for three things when considering a loan application : (1) ability to repay the loan, (2) collateral, and (3) record. The small business entrepreneur should take along three recent financial statements when applying for a loan or a line of credit : (1) a balance sheet, (2) an income statement, and (3) a cash flow statement.

Collateral refers to the personal or business possessions an owner is willing to assign to the lender as a contract for debt repayment . If the borrower does not repay the debt, all collateral remits to the lender to repay the loan.

Financial Analysis

Financial analysis is one of the roots of management used to carry out its controlling function. Proper interpretation of data presented by the financial statement helps in judging the profitability of operations during given time periods, in determining the soundness of financial condition at a specific date, in determining the soundness of financial condition at a specified date, in determining future potential to meet existing or anticipated credit obligations and in developing performance trends to be used as a basis for future decision making. The term financial statement refers to two basic statements that an accountant prepares at the end of a specified period of time for a business enterprise.

- 1) Balance sheet: It is a statement of financial position of a firm at a particular point of time.
- 2) Income statement: It is also called profit-loss statement. It shows firm's earnings for the period covered, usually half yearly or yearly.

Balance Sheet

From an analyst point of view, it is a written representation of resources and liabilities of the business firm. It shows the financial condition of the business firm at a given date. The balance sheet contains and reports on assets, liabilities and net worth of a firm. Assets must always equal the sum of liabilities and net worth. What is owned by or owed to firm (assets) must equal what the firm owes to its creditors plus what is owed to its owners (net worth). Balance sheet indicates the sources from which business obtained capital for its operations and the form in which that capital is invested on a specific date. **Net worth** represents owner's equity in the business.

Limitation : It is an interim statement between two operating periods. It summarizes solvency of business at a given time rather than financial transactions occurred in business during an accounting period.

Balance Sheet of Ramakanth as on 31.12.2002.

How beneficial to owners?

- It determines the safety of their investments.
- The probability of additional capital requirements.
- Possibility of withdrawals or dividends.
- Need for reorganization or liquidation.

| Assets | | | Liabilities | | |
|----------------------------|---------------------------|----------|---------------------------------|---|----------|
| No. | Current Assets | Rs. | No. | Current Liabilities | Rs. |
| 1. | Bank Balance | 30,000 | 16. | Operating loan payment | 15,000 |
| 2. | Cash on hand | 300 | 17. | Forthcoming principal due on long term loan | 3,000 |
| 3. | Accounts receivables | 800 | | | |
| 4. | Cocoon for sale | 5000 | | | |
| 5. | Crops & supplies | 3000 | | | |
| | Total current Assets | 39,100 | 18. | Total current liabilities | 18,000 |
| Intermediate Assets | | | Intermediate liabilities | | |
| 6. | Bullock pair | 6,000 | 19. | Balance of sheep loan | 7,000 |
| 7. | Milch Animal | 3,000 | | | |
| 8. | Oil engine | 7,000 | | | |
| 9. | Bullock cart | 4,000 | | | |
| | Total intermediate Assets | 20,000 | 20. | Total interm. liabilities | 7,000 |
| Long term Assets | | | Long term Liabilities | | |
| 10. | Land Dry land 10 Ac | 80,000 | 21. | Mortgage of land | 25,000 |
| 11. | Garden land 3 Ac | 60,000 | | | |
| 12. | Wet land ½ Ac | 15,000 | | | |
| 13. | Mango garden | 25,000 | 22. | Total long term liabilities | 50,000 |
| 14. | Total long term Assets | 1,80,000 | 23. | Net Worth | 1,89,100 |
| 15. | Total Assets | 2,39,100 | 24. | Total liabilities | 2,39,000 |

How useful to creditors?

- Help in determining the involved in granting credit.
- How much money safely be granted.

How helpful to management?

- Helps to judge the results of its operating activities and in planning for proper financing of future operations.

2. Income Statement

It is also called profit and loss statement. It states the source of firm's incomes, describes the nature of the expenses, and shows the net profit earned (or net loss incurred) during an accounting period. It is supporting evidence to balance sheet, in the sense, that it explains the change in retained earnings on the balance sheet.

Uses of Income Statement

- Can determine what profit is earned by the business.
- Can find particular causes of low profit or operating losses.
- Management can take action to prevent the occurrences of future losses or to prevent further decline in profits

Comparison of balance sheet and income statement

| No . | Balance sheet or Net worth statement | Income statement or profit or loss statement |
|------|---|---|
| 1. | Net worth statement is a summary of assets, liabilities and owner's equity at a given point of time. | Income statement is a summary of both cash and non cash financial transactions of farm business accrued during the selected accounting period |
| 2. | The most commonly requested document by a lender in reviewing a loan request. | It is used to measure the financial profitability of business during a period of time. |
| 3 | It is used in preparation of income statement and tax returns | It is used in making an analysis of the business profitability, efficiency and financial stability. |
| 4. | Net worth statement offers a little insight into financial transactions of accrued in business during an accounting period. | Information from this document is used in preparation of cash flow summary. |

Cash flow statement

The cash flow statement is a measure of changes in cash the business has on hand from month to month. It records or projects all cash receipts less all cash disbursements. A business may use the cash flow statement as a record of what has occurred to cash or as a projection into the future to determine future needs for cash or as both.

The cash flow statement is accurate when it is a record of past receipts and disbursements and an estimate when it is projected for future months. The cash flow statement is usually calculated on a monthly basis for an entire year.

**Profit and Loss Statement of Farm B for the period
Jan 1, 2001 to Dec 31,2002.**

| S. No | Particulars | Amount in Rs. | | |
|-------|---|---------------|--------|--------|
| | INCOME | | | |
| | Cash Receipts | | | |
| 1. | Paddy sales 30 qtl. | 7,500 | | |
| 2. | Sugarcane sales 16 tonnes | 5,500 | | |
| 3. | Groundnut sales 20 qtl. | 12,000 | | |
| 4. | Milk sale 100 ltr. | 3,800 | | |
| 5. | Broiler sales 200 birds | 10,500 | | |
| 6. | Miscellaneous income | 1,500 | | |
| 7. | Total cash receipts | | 40,800 | |
| | Net Capital gains Income | | | |
| 8. | Sale of purchased milch animal | 2,000 | | |
| 9. | Home bred animal sale | 2,000 | | |
| 10. | Machinery sale | 150 | | |
| 11. | Total net capital gains | | 4,150 | |
| | Changes in Inventory Value | | | |
| 12. | Crops in inventory | 6,000 | | |
| 13. | Livestock in inventory | - | | |
| | | 1,000 | | |
| 14. | Total changes in inventory value | | 5,000 | |
| 15. | Gross farm income | | | 49,950 |
| | EXPENSES | | | |
| | Operating expenses | | | |
| 16. | Hired labour | 3,000 | | |
| 17. | Hired bullock labour | 4,000 | | |
| 18. | Machinery, fuel, repairs | 2,500 | | |
| 19. | Fertilizers | 500 | | |
| 20. | Other crop expenses | 1,400 | | |
| 21. | Livestock, machinery, veterinary and marketing expenses | 1,000 | | |
| 22. | Interest on current debts | 600 | | |
| 23. | Miscellaneous expenses | 700 | | |
| 24. | Total operating expenses | | 13,700 | |

| | | | | |
|-----|----------------|--|--|--|
| 25. | Fixed Expenses | | | |
|-----|----------------|--|--|--|

| | | | | |
|-----|--|-------|--------|--------|
| | Land rent | 3,000 | | |
| 26. | Land revenue | 500 | | |
| 27. | Improvement repairs | 4,200 | | |
| 28. | Interest on intermediate and long term loans | 1,000 | | |
| 29. | Equipment depreciation | 1,500 | | |
| 30. | Livestock depreciation | 1,000 | | |
| 31. | Attached farm servants wages | 1,000 | | |
| 32. | Depreciation on buildings, improvements | 600 | | |
| 33. | Total fixed expenses | | 12,800 | |
| 34. | Total expenses | | | 26,500 |
| 35. | Net farm income | | | 23,450 |

Financial Tests

Ratio analysis: It has the following advantages

- Has no units
- Compares numerator with respect to denominator
- Relative and comparable

Ratio analysis will explain what strength, weakness, pressures and forces are currently at work in your business operation farm business managers will need a full time job accountant for the change accruing in his capital structure and net worth as revealed in his balance sheet.

Ratio analysis of properly calculated rates can be readily compared with i) firm's past ratio in order to show trends, ii) ratio of other firms of similar size, large size or of smaller size with which the manager is familiar, iii) industrial standards and iv) projected goals as reflected in plans for the future.

Fundamental difference between ratio analysis and trend is that the ratio analysis measures the movement in absolute terms whereas the trend indicates the relationship. The marginal analysis used in determining the most profitable combination of resources and products. The concern with last added or marginal unit of input and product.

There are three types of financial tests and they are a) tests of liquidity, b) tests of solvency and c) tests of profitability.

a) Tests of liquidity

Tests of liquidity are usually conducted to determine the firm's ability to meet its current financial obligations. The current ratio is the most commonly recognized indicator of a firm's liquidity.

$$\text{i) Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{39,100}{18,000} = 2.17$$

Nature of current assets determines the value whether the firm is able to meet promptly the current liabilities. The reasonableness of any current ratio can be tested by comparing current ratios of similar firm in the industry.

ii) Acid test ratio (ATR) or quick current ratio

$$\text{ATR} = \frac{\text{Current monetary assets}}{\text{Current liabilities}} = \frac{31,100}{18,000} = 1.73$$

The difference between current ratio and acid test ratio is the elimination of inventories in current assets used in acid test ratio. If a firm's cash marketable securities and accounts receivable are more than sufficient to meet its current liabilities, then inventories may be viewed as a buffer to absorb any subsequent deficiency in the receivables, such as unexpected bad debt.

iii) The inventory to receivable ratio

$$\frac{\text{Inventory}}{\text{Total receivables}} = \frac{8,000}{800} = 10.00$$

It also associated with the acid test ratio. Inventory represents cost items while receivables presumably include profit. Hence, a favourable change in this ratio may be due to the execution of profitability convert its inventory into liquid cash. It also has relevance in identifying a firm's current position in a business cycle since inventory generally is more subject to the value changes than the receivables are.

b) Tests of Solvency

Tests of solvency are designed to measure a firm's ability to meet both interest charge and repayment of loans associated with its long-term financial commitments. Tests of solvency tell the manager how well his firm will survive a crisis but will provide little information as to the firm's normal operational viability.

i) Net worth to total debt ratio

$$\frac{\text{Net worth}}{\text{Total liability}} = \frac{1,89,100}{2,39,100} = 0.79$$

In general, the larger the net worth to total debt ratio, the less a firm's creditors concern themselves with thoughts of fore closure. It should be noted that some business may attempt to improve their current ratio, though not necessarily their financial health, though a simple funding operation. They decrease their current obligations by increasing long term debt and leave the total debt used by the manager as a valuable supplement to the current ratio. Where a very large proportion of a firm's total debt is funded, a manager may choose to use an auxiliary ratio of net worth to current liabilities, there by emphasizing the relative size of funded debt and its effect on solvency.

ii) Net worth to fixed asset ratio

$$\frac{\text{Net worth}}{\text{Fixed assets}} = \frac{1,89,100}{1,80,000} = 1.05$$

This ratio indicates the proportion to the owner's equity invested in fixed assets. The ratio of above one, if it exists, represents the proportion of owner's equity involved in the firm's working capital. A raising net worth to fixed asset ratio indicates that management may be less concerned with insolvency. A declining ratio serves to warn management that the firm possibly may be expanding its physical plant beyond its current ability to support it financially. This would be particularly important to management during a general period of declining business.

c) Tests of Profitability

Two subgroups of financial ratios are generally used by management to test the profitability of a business. The first sub-group involves those ratios that measure profitability of a business. The first sub-

group involves those ratios that measure profitability as related to investment. The second is more concerned with measuring profitability as related to sales. Both sub-groups of ratios are helpful to managers in identifying performance trends over time and/ or comparing profit performance among similar business firms.

i) The earnings to investment ratio

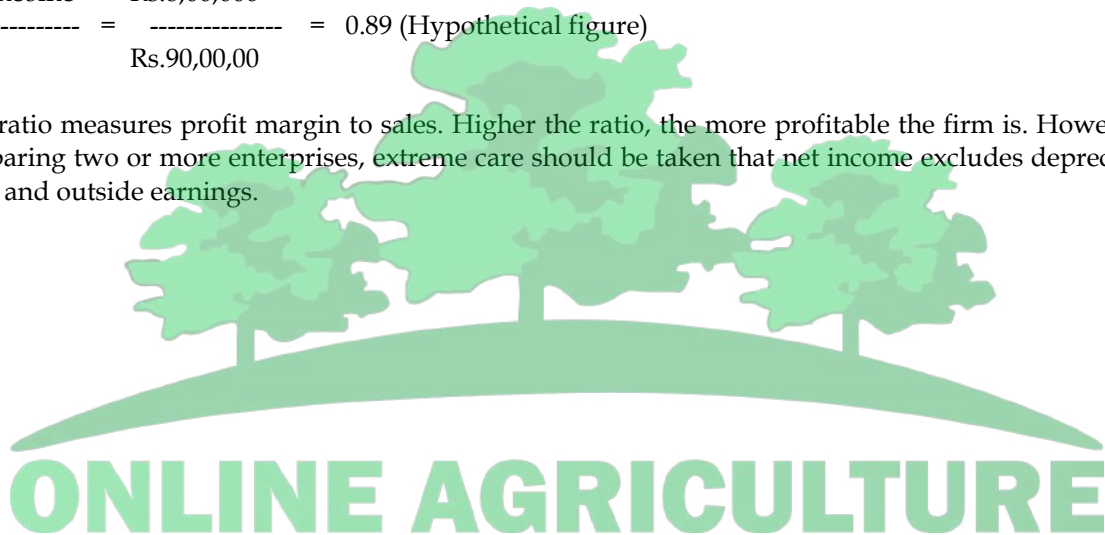
$$\frac{\text{Net income}}{\text{Net worth}} = \frac{\text{Rs.8,00,000}}{\text{Rs. 80,00,000}} = 0.1 \text{ (Hypothetical figure)}$$

This ratio is investor oriented and is of particular interest to the stock holders in so far as it has a direct impact on dividends.

ii) The earnings to sales ratio

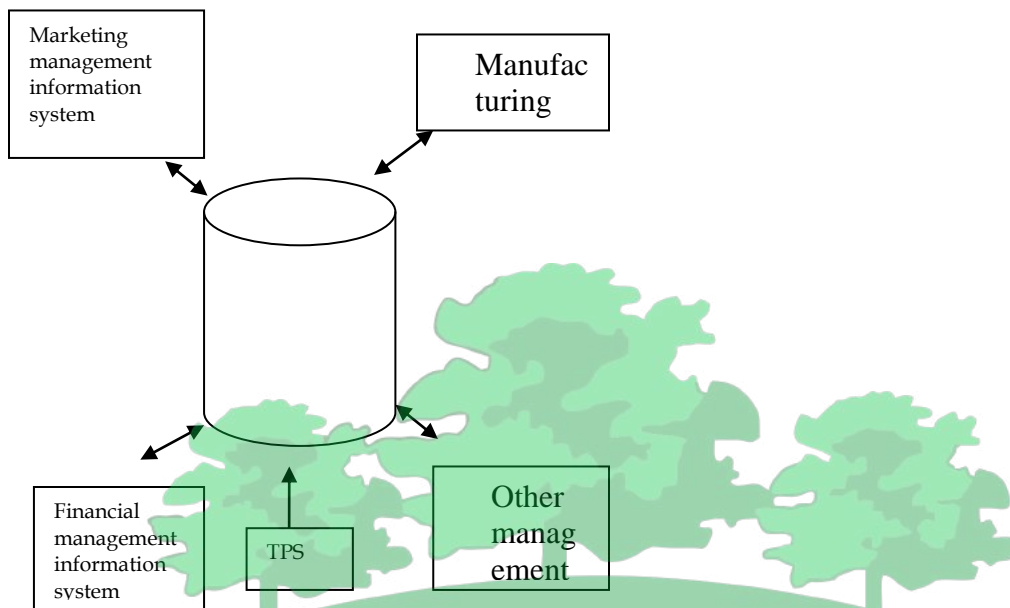
$$\frac{\text{Net income}}{\text{Sales}} = \frac{\text{Rs.8,00,000}}{\text{Rs.90,00,00}} = 0.89 \text{ (Hypothetical figure)}$$

This ratio measures profit margin to sales. Higher the ratio, the more profitable the firm is. However, in comparing two or more enterprises, extreme care should be taken that net income excludes depreciation, taxes and outside earnings.



13. MANAGEMENT INFORMATION SYSTEM

A management information system (MIS) is an organized collection of people, procedures, software, databases, and devices used to provide routine information to managers and decision makers. The focus of an MIS is primarily on operational efficiency. Marketing, production, finance, and other functional areas are supported by MIS and linked through a common database. MIS typically provide standard reports generated with data and information from the transaction processing system (Figure 13.1)



MIS began to be developed in the 1960s and are characterized by the use of information systems to provide reports were produced periodically – daily, weekly, or monthly. On a regular basis, they were called *scheduled reports*. Other scheduled reports could be used to help managers from a variety of departments control customer credit, payments to suppliers, the performance of sales representatives, inventory levels, and more.

Other types of reports were also developed during the early stages of MIS. Demand reports were developed to give decision makers certain information upon request. For example, prior to closing a sale, a sales representative might seek a demand report on how much inventory exists for a particular item. This report would tell the representative if enough inventory of the item is on hand to fill the customer order. Exception reports describe unusual or critical situations, like low inventory levels. The exception report is produced only if a certain condition exists – in this case, inventory falling below a specified level.

Information systems in the functional areas of business

Information systems are used in all functional areas and operating division of business. In finance and accounting, information systems are used to forecast revenues and business activity, determine the best sources and uses of funds, manage cash and other financial resources, analyze investments, and perform audits to make sure the organization is financially sound and that all financial reports and documents are accurate. In sales and marketing, information systems are used to develop new goods and services (product analysis), determine the best advertising and sales approaches (promotion analysis), and set product prices to get the higher total revenue (price analysis).

In manufacturing, information systems are used to process customer orders, develop production schedules, control inventory levels, and monitor product quality. Information systems are also used in the

human resource management to screen applicants, administer performance tests to employees, monitor employee productivity and more. Legal information systems are used to analyze product liability and warranties and to develop important legal documents and reports.

Information system principles

Assembling an effective, efficient computer subsystem requires an understanding of its relationship to the information system and the organization. While we generally refer to the computer subsystem as simply a computer system. We must remember that the computer system objectives are subordinate to, but supportive of, the information system and organization.

The components of all information systems – such as input devices, people, procedures, and goals – are all independent. Because the performance of one system affects the others, all these systems should be measured according to the same standards of effectiveness and efficiency, given issues of cost, control, and complexity.

When selecting computer system, you also must consider the current and future needs of these systems. Your choice of a particular computer system should always allow for later improvements in the overall information system. Reasoned forethought – a trait required for dealing with computers, information, and organizational systems of all sizes- is the hall mark of true systems professional. Determine your hardware needs based on how the hardware will be used to support the objectives of the information systems and goals of the organization. Consider the trade- offs between overall systems performance and cost, control and complexity.

Characteristics of a management information system

In general management information system performs the following functions:

1. Provide reports with fixed and standard formats.
2. Produce hard - copy and soft- copy reports.
3. Use internal data stored in the system.
4. End users are able to develop their own custom reports.
5. Require formal requests from users.



ONLINE AGRICULTURE

14. GOVERNMENT PROGRAMMES AND REGULATIONS FOR AGRIBUSINESS

Government programmes for agribusiness

Both the central government and state governments have devised programmes to woo the entrepreneurs for setting up agribusiness in India. They may be classified as programmes falling under small-scale industries, Khadi village industries, small and medium industries, large industries based on the finance required for investment. Apart from these to harness the export market after signing the WTO agreement. They include conversion of Export Processing Zones (EPZ) into Special Economic Zones (SEZ), establishment of Agri-export zones. For which government is attracting private investors to make investment in infrastructure development like cold storage chains, improvement in road, rail, sea and air transport systems.

The Ministry of Small Scale Industries & Agro and Rural Industries designs and implements the policies through its field organizations for promotion and growth of small and tiny enterprises, including the coir industries. The Ministry also coordinates with other Ministries / Departments on behalf the Small Scale Industries (SSI) sector.

The implementation of policies and various programmes/schemes for providing infrastructure and support services to small enterprises is undertaken through its attached office, namely the Small Industry Development Organization (SIDO), statutory bodies/other organizations likely Khadi and Village Industries Commission (KVIC) & Coir Board a Public Sector Undertaking - National Small Industries Corporation (NSIC) and three training institutes - National Institute of Small Industry Extension Training (NISIET), Hyderabad, National Institute for Entrepreneurship and Small Business Development (NIESBUD), New Delhi and Indian Institute of Entrepreneurship (IIE), Guwahati.

Entrepreneurial Training institutes

There are three institutes engaged in training of small-scale entrepreneurs. These are Indian Institute of Entrepreneurship (IIE), Guwahati, National Institute of Small Industry Extension Training (NISIET), Hyderabad, National Institute for Entrepreneurship and Small Business Development (NIESBUD), New Delhi.

Fragrance & Flavour Development Centre (FFDC), Kannauj

Fragrance & Flavour Development Centre (FFDC) has been set up as an autonomous body in the year 1991 by Govt. of India with the assistance of UNDP/UNIDO and Govt. of U.P/UNDP/UNIDO has provided technical expertise and imported equipments. Govt. of U.P has provided land and building while Govt. of India has been contributing for indigenous equipments and recurring expenditure. Main objectives of the Centre is to serve, sustain and upgrade the status of farmers and industry engaged in the aromatic cultivation and its processing, so as to make them competitive both in the local and global market.

Export Processing Zones

The export zones (EPZ) set up as enclaves, separated from the Domestic Tariffs Areas by fiscal barriers, are intended to provide a competitive duty free environment for export production. There are four EPZs set up by the Government at Noida(Uttar Pradesh), Chennai (Tamil Nadu), Palta (West Bengal) and Vishakapatnam (Andhra Pradesh).

Special Economic Zones

A new scheme for setting up of Special Economic Zones (SEZs) in the country to promote exports was announced by the Government in the Export and Import Policy on 31st March, 2000. The policy provided for setting up of SEZs in the public, private, joint sectors or by State Governments. It was also announced that some of the existing Export Processing Zones would be converted into SEZs. Accordingly, the Government has issued notification on 1-11-2000 for conversion of the existing Export Processing Zones at Kandla (Gujarat), Santa Cruz(Maharashtra) and Cochin (Kerala) into SEZs. Notification has also been issued for conversion of the private sector EPZ at Surat (Gujarat) into the Special Economic Zone at the request of the promoters.

Export Oriented Units (EOU)

The export Oriented units (EOU) scheme introduced in the early 1981, is complementary to the EPZ scheme. It adopts the same production regime but offers a wide option in locations with reference to factors like source of materials, ports of export, hinter land facilities, and availability of technological skills, existence of industrial base and the need for a large area of land for the project. And 1,536 units are in operation under the EPU scheme as on March, 2001.

Product range: EOUs are mainly concentrated in textiles and yarn, food processing, electronics, chemicals, plastics, granites and minerals/ores. Majority of units are located in Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra and Gujarat.

Export Promotion Industrial Park (EPIP) Scheme: A centrally sponsored " Export Promotion Industrial Park (EPIP) Scheme has been introduced in 1993-94 with a view to involving the State Governments in the creation of infrastructure facilities for export oriented production. The scheme provides that 75 % of the capital expenditure incurred towards creation of such facilities, ordinarily limited to Rs. 10 crores in each case, will be met from a central grant to the State Governments.

New Anna Marumalarchi Thittam: The State Government of Tamil Nadu has introduced the New Anna Marumalarchi Thittam in April 2002 to set up agribusiness units with a minimum investment of Rs 35 lakhs at the rate of one unit in each block. This scheme provides scope for setting 385 agribusiness units in Tamil Nadu.

AgriClinic and Agribusiness Centres: Small Farmers Agribusiness Consortium in co-operation with MANAGE has drawn plans to provide training on management capacity building for those willing to set up Agriclincs and Agribusiness Centres either as individual or a group five (four agricultural and allied graduates and one management graduate) with a maximum loan assistance of Rs. 10 lakhs for individuals and Rs 50 lakhs for a group of five entrepreneurs.

Regulations

Legal regulations

Decisions are strongly affected by laws pertaining to competition, price setting, distribution arrangements, advertising, etc. It is necessary for a manager to understand the legal environment of the country and the jurisdiction of its courts. The following laws affecting business in India are important.

- 1) Indian Contract Act, 1872
- 2) Factories Act, 1948
- 3) Minimum Wages Act, 1948
- 4) Securities contracts Regulation Act, 1956 (Now replaced by SEBI Act)
- 5) The Companies Act, 1956
- 6) Trade and merchandise Marks Act, 1958
- 7) Monopolies and Restrictive Trade Practices Act, 1969
- 8) The water (Prevention and Control of Pollution) Act, 1974
- 9) The Air (Prevention and Control of pollution) Act, 1981
- 10) Sick Industrial Companies (Special provision) act, 1985
- 11) Environment protection Act, 1986
- 12) Consumer protection Act, 1986
- 13) Securities and Exchange Board of India Act, 1992
- 14) Taxation laws covering Corporate tax, indirect taxes like Excise, Customs, Sales tax and Wealth tax)

FOOD SAFETY & QUALITY

Fruit Products Order (FPO), 1995

Fruit Products Order -1955, promulgated under Section 3 of the Essential Commodities Act - 1955, aims at regulating sanitary and hygienic conditions in manufacture of fruit, vegetable products. It is mandatory for all manufacturers of fruit, vegetable products to obtain a license under this Order. To ensure good quality products, manufactured under hygienic conditions, the Fruit Product Order lays down the minimum requirements for:

1. Sanitary and hygienic conditions of premises, surrounding and personnel.
2. Water to be used for processing.
3. Machinery and equipment.

4. Product standards.

Besides this, maximum limits of preservatives, additives and contaminants have also been specified for various products.

This order is implemented by Ministry of Food Processing Industries through the Directorate of Fruit & Vegetable Preservation at New Delhi. The Directorate has four regional offices located at Delhi. The Directorate has four regional offices located at Delhi, Mumbai, Calcutta and Chennai, as well as sub-offices at Lucknow and Guwahati. The officials of the Directorate undertake frequent inspections of the manufacturing units and draw random samples of products from the manufactures and markets which are analyzed in the laboratories to test their conformity with the specifications laid under FPO.

The Central Fruit Advisory Committee comprising of the officials of concerned Government Departments, Technical experts, representatives of Central food Technology Research Institute, Bureau of Indian standards, Fruits and Vegetable Products and processing Industry, is responsible for recommending amendments in the Fruit Product Order, In view of the demands of the industry, and the liberalized economic scenario, major amendments were made in FPO during 1997.

Meat Food Products Order (MFPO)

Meat Food Products Order, 1973 (MFPO) promulgated under the provisions of Essential Commodities Act, 1955 provides for sanitary and other requirements, limits of heavy metals, preservatives, insecticides, residue, etc., for meat food products. This order was being implemented by Ministry of Rural Development in the Ministry of Rural Area & Employment. As on 31st March 1998 there were 128 licenses issued under MFPO 1973. As per the recent amendment to the Allocation of Business, Ministry of Agriculture (Deptt. of Agriculture & Cooperation) would now be the Administrative Ministry for this Order.

Milk & Milk Products Order (MMPO)

Milk and Milk Products Order, 1992 administered by the Department of Animal Husbandry & Dairying under Ministry of Agriculture was promulgated on 9th June, 1992 under the provision of Section 3 of the Essential Commodities Act, 1955 with a view to maintain an increased supply of liquid milk of desired quality to the general public. This order regulated production, supply and distribution of milk and milk products throughout the country. The order also seeks to ensure the observance of sanitary requirements for dairies, machinery and premises, and quality control standards for milk and milk products. So far, 254 registration certificates under MOP, 1992 has been issued by the Department of Animal Husbandry and Dairying.

Codex Alimentarius

The term Codex Alimentarius is taken from Latin and means food code. Codex Alimentarius brings together all the interested parties -scientists, technical experts, governments, consumers and industry representatives to help develop standards for food manufacturing and trade. These standards, guidelines and recommendations are recognized worldwide for their vital role in protecting the consumer and facilitating international trade. As Codex Alimentarius represent a consensus of food and trade experts from around the world, these standards are more and more being used in international trade negotiations and also for settling of disputes by WTO

The Codex contract Point in India is the Directorate General of Health Services (DGHS) in the Ministry of Health; however, the Ministry of Food processing Industries is closely associated with the activities of Codex Alimentarius. Under the Plan schemes, a scheme for setting up of Codex Monitoring Cell in the Ministry with the allocations of Rs.58.00 lakhs in 1998-99 has been formulated for creating data base, technical examination of various standards in association with experts. A delegation led by a senior officer of this Ministry Participated in the meeting of the Codex Committee on food Labeling at Ottawa from 25th to 29th May, 1998. Another Officer from this Ministry was Member of the Indian delegation for the meeting of the Codex Committee on General Principles held at Paris, France from 7th to 11th September, 1998

The Pulses, Edible Oilseeds and Edible Oils (Storage) Order.1977 empowers the government to put maximum stock limits on wholesalers and retailers of pulses, oilseed and oils and is designed to maintain supplies and ensure equitable distribution and availability at fair prices of these items.

Food Quality

The Food Processing Ministry cleared a proposal for release of Rs.59.2 lakhs to Food Research and Analysis Center, New Delhi for up gradation of its Food Analysis and Quality Control Laboratory for analysis of food products. The main objective of the proposal is to upgrade the existing analytical laboratory and bring it on par with any other modern analytical laboratory in the country. During the year under review, the Ministry cleared a proposal in principle for release of 12.32 lakhs to CCS Haryana Agriculture University, Hissar for up gradation of quality control and food analysis laboratory of the Department of Food Science and Technology of the university. The main objective of the proposal are to provide quality assurance and analytical services to the food processing industries, to undertake micro biological examination of various pathogen and mycotoxins and to estimate nutritional parameters including minerals, vitamins, food value in calories, protein carbohydrates, fats etc.

Hazard Analysis and Critical Control Point (HACCP)

Hazard Analysis and Critical Control Point (HACCP) is an important quality assurance system. This system ensures that the products are safe and of good quality. The system is extremely desirable in view of the changing scenario in the International trade. The Ministry provides grant of 50% subject to a limit of Rs.10 lakhs towards the cost of implementing Total Quality Management (TQM) including HACCP and ISO-9000 certifications.

This Ministry sponsored a one-day seminar and five day training programme organized by APEDA from 30th November to 5th December 1998 in collaboration with NSF-International strategic Registration Limited, USA, which is the main authority for certifying HACCP-9000. HACCP is an important requirement for ensuring the quality of products from health and safety aspects and is crucial for exports.

Laws relating to food processing industries

There are a number of food laws being implemented by various Ministries/Departments. These are primarily meant for two purposes namely (1) Regulation of Specifications of food and (2) Regulation of Hygienic condition of Processing/Manufacturing. Some of these food laws are mandatory and some are voluntary. The details of various food laws in operation in India are as under:-

A FOOD LAWS:

1. Prevention of Food Adulteration Act (Ministry of Health)

The Act lays down specifications for various food products and is mandatory. The Ministry of Health in 1995 had constituted a Task Force under the chairmanship of Shri E.S. Venkataramaiah, Chief Justice of India (retired). The Task Force recommended that there should be emphasis on good manufacturing practices instead of detection of adulteration and prosecution. It also expresses concern about lack of laboratory equipments and quantified persons. In addition it also suggested that the name of PFA Act be changed to Food Safety Act.

2. Agriculture Produce (Grading & Marking) Act (Ministry of Rural Development)

This Act is commonly known as AGMARK and is voluntary. The Act lays down the specifications for various agricultural commodities including some processed foods.

3. Laws being operated by Bureau of Indian Standards (BIS)

BIS is the largest body for formulating standards for various food items. These standards are also voluntary.

4. Essential Commodities Act

A number of quality control orders have been issued under Essential Commodities Act such as FPO, MMPO, Meat Product Order and Vegetable Oils Control Order. These orders are mandatory and primarily meant for regulating the hygienic conditions. They need to be clubbed under one order which may called Food Products Order.

B. Harmonization of Food Laws

The review of multiple laws is necessary to have a uniform and logical approach for regulating the quality of food. The following action is being taken by various Ministries:-

1. The Ministry of Civil Supplies & Consumer Affairs has brought out a paper for consideration of Committee of Secretaries (COS). The paper recommends that BIS should formulate standards for all food items in the country. This will be a major step towards harmonization of food laws and is still under consideration of COS for finalization.

2. The Task Force constituted by the Prime Minister under the chairmanship of Shri Nulsi Wadia has submitted its report which is under the consideration of the Government. The Task Force had advocated promotion of food safety and quality. The Task Force has further made following suggestions:-

- Food Regulation Authority (FRA) is set up to formulate and update food standards for domestic and export market.
- FRA should replace the PFA to conform to international standards. The Task Force has given ten specific recommendations such as provision of storage simplicitor, simplification of sampling procedure, simplification of procedure for nominee, time limit for prosecution, standard methods of analysis to be prescribed, penalty should graded according to the gravity of offences and provision of adequate/infrastructure and laboratories.
- Harmonization of Indian standard with quality norms of Codex and WTO.

The Central Committee of food Standard (CCFS) should be replaced by FRA Governing Body for expeditious decisions.

Whom to approach for what

| S. No | Steps involved | Persons/ Officers to be contacted |
|-------|---|--|
| 1 | Product selection and assistance in preparation of project report/feasibility/re port/market survey | Small Industries Service Centre, Chennai |
| 2 | Obtaining provisional /permanent registration certificate | District Industries Centre of the concerned district where the unit is to be set up |
| 3 | Registration under sales tax | o/o The Commissioner of Commercial Taxes, Chennai |
| 4 | Registration under central excise | O/O The Collector of central Excise & customs, Chennai |
| 5 | Obtaining Finance | Nationalized banks Private Commercial banks Tamil Nadu Industrial Investment Corporation Small Industries Development Bank of India |
| 6 | Obtaining water supply | Tamil Nadu Water Supply & Drainage board |
| 7 | Obtaining Power connection | Tamil Nadu Electricity Board |
| 8 | Registration under | Employees State |

| | | |
|----|--|---|
| | ESI Act (applicable for units employing 20 or more workers) | Insurance Corporation, Chennai |
| 9 | Obtaining ISI Certificate | Bureau of Indian Standards, Nanak Bhavan, New Delhi |
| 10 | Obtaining the Trade mark registration | Registrar of Trade markers, 9 Judge jumbulingam Mudaliar road, Chennai |
| 11 | Obtaining patent Right | The Controller of patents and Design, 776 Triplicane high road, Chennai |
| 12 | Obtaining license under food products order for manufacture of food products | Deputy director, Directorate of Marketing 7 Inspection, Ministry of Food & Agriculture, Sastry Bhavan, 35 Haddows Road, Chennai-600006. |
| 13 | Obtaining Information on manufacturing of essential oils | Central Institute of Medicinal 7 aromatic plants, Regional Centre, UAS, GKVK Campus, Hebbal, Bangalore |
| 14 | License for Drug &Cosmetic manufacture | Drug Controller Office of the Drug Controller, Chennai |
| 15 | Pollution control License | Tamil Nadu Pollution control Board, Chennai |
| 16 | Setting up of Rice Solvent Extraction Units | Tamil Nadu Civil Supplies Department, Chennai |

15. AGRICULTURAL INPUTS AND AGRO-PROCESSING

Agro- inputs are either biological or chemical or inorganic compounds used in the production of agricultural and allied products. Some of the agro-inputs used in India is

1. In-organic fertilizers
2. Pesticides which includes insecticide, fungicide, nematicide and herbicide
3. Seeds which includes varieties, hybrids and genetically modified plant materials
4. Vegetatively propagated planting materials
5. Bio-fertilizers
6. Organic inputs which includes compost, vermi-compost, enriched farm yard manure, oil meals, farm yard manure
7. Bio-pesticides
8. Bio-control agents
9. Plant Growth regulators
10. Micro-nutrients
11. Farm machinery and agricultural tools and implements
12. Animal feeds
13. Poultry feed

The production and distribution of above mentioned agricultural inputs creates agri-business opportunities. The agricultural input production inputs and distribution firms may be big companies like Madras Fertilizers, SPIC, FACT, EID Parry Monsanto, Syngenta or MAHYCO and the like. They may also be small business firms like vermi-composting, coir pith decomposing.

The agro and food processing industry in India is utmost significance in terms of employment and income generation, poverty alleviation, export promotion and foreign exchange earnings. The

growth of the processed food sector is expected to make a quantum jump of Rs.1,75,000 crores by 2005. Although India is one of the largest producers of raw materials for the food processing industries in the world, the industry itself is underdeveloped in India. Less than 2 per cent of fruits and vegetable production is processed, compared to 30 per cent in Thailand, 70 per cent in Brazil, 78 per cent in Philippines and 80 per cent in Malaysia. The value addition in food sector is as low as 7 per cent. There is need for increasing food processing from 2 to 10 per cent by 2010. This will require an investment of Rs. 1,40,000 crores in the food processing sector. The investment will generate direct employment for 77 lakh persons and indirect employment for three crore people. This will reduce wastage by Rs.80,000 crores. Apart from these advantages, the value addition of food product will go up from 7 to 35 per cent which will be reflected in the corresponding increase in Gross National Product (GNP).

Types food processing industries

Primary processing industries

Rice milling

Roller Flour milling

Pulse milling

Oil milling

Cereal based products (bread biscuits)

Cocoa Products

Soft drinks

Alcoholic drinks

Horticulture

Fruits and vegetables

Milk and milk products

Meat processing

Poultry processing

Fish processing

Food packaging

A strategic Assessment of Food, Beverage and Agribusiness Opportunities in India are furnished in Table 15.1.

Table. 15.1 Processed Food markets

| Product | Volume (metric tones) | Value (US \$ million) | Major players |
|---|------------------------------|------------------------------|--|
| <u>Basic foods</u> | | | |
| Packaged wheat flour(including branded flour) | 1 million | 8 | Hindustan Lever Limited(HLL), Pillsbury, Best foods India Ltd., |
| Spices | 2.45 million | 3780 | Regional |
| Edible oil | 8 million | 8820 | ITC agrotech, Marico Industries, HLL, NDDDB, Ahmed Oil Mills Ltd |
| Salt | 500,000 | 60 | Gujarat Salt Federation, Hindustan Salt Works, Tata Chemicals, Bestfoods India Ltd., |
| Sugar | 15 million | 7,150 | Government, co-operatives |
| Eggs | 33 billion eggs | 780 | Government Poultry Corporations, National Egg Co-ordination Committee |
| Poultry meat | 550,000 | n.a. | Govt. Poultry Corporations |

| | | | |
|---|--|-----|--|
| Milk (total) | 73.5 million | | NDDB |
| <u>Bakery products(including unorganized sector)</u> | | | |
| Biscuits and cakes | 1 million (biscuits) 500,000(cakes) | 775 | Britannia Industries Ltd., Parle Products, Bakeman's |
| Bread | 1.5 million | 350 | Britannia India Ltd., Modern Industries (now with HLL), Spencer's |

Indian Dairy products

| | | | |
|--|---------|------|---------------|
| Ghee (Butter oil) (organized sector only) | 85,000 | n.a. | |
| Indian Milk sweets(including unorganized sector) | 300,000 | 350 | Small players |

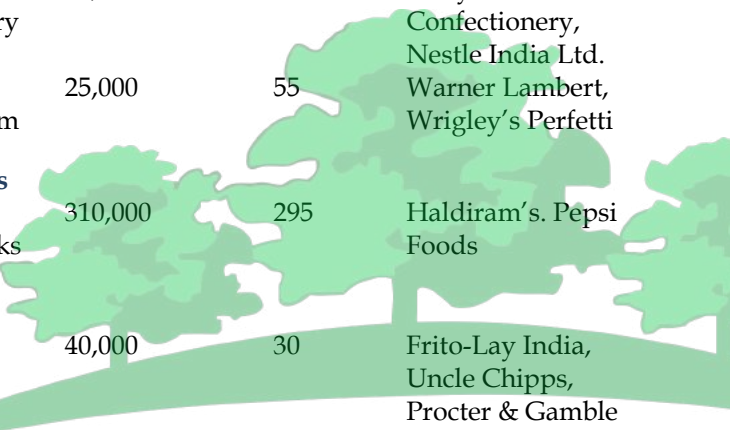
Western dairy foods (organized sector)

| | | | |
|-----------|-------------------|-----|--|
| Ice cream | 50 million liters | 120 | HLL, Gujarat Co-operative Milk Marketing Federation, Hutsun Agro |
| Butter | 80,000 | 200 | Gujarat Co-operative Milk Marketing Federation, Britannia Industries Ltd., |
| Cheese | 12,000 | 30 | Gujarat Co-operative Milk Marketing |

| Product | Volume (metric tones) | Value (US \$ million) | Major players |
|--|-----------------------|-----------------------|---|
| Dairy whitener | 48,000 | 85 | Federation, Britannia Industries Ltd., Nestle India Ltd., Gujarat Co-operative Milk Marketing Federation |
| Western dairy foods (organized sector) contd.. | 100,000 | 100 | Gujarat Co-operative Milk Marketing Federation, Nestle India Ltd., Cadbury India Ltd., Smithkline Beecham Consumer products, Nestle India Ltd., |
| Malted food drinks | 65,000 | 140 | |

Processed fruit and vegetable products

| | | | |
|---|---------|----|---|
| Pickles | 120,000 | 28 | Nestle India Ltd., American Dry Fruits, Ruchi, Bedeker's, Priya |
| Fruit Beverages | 130,000 | 80 | HLL, Parle Products, Enkaye, Texofoods |
| Fruit spreads, sauces & ketchup | 50,000 | 43 | HLL, Marico Industries |
| <u>Convenience foods (organized sector)</u> | | | |
| Chocolate | 20,000 | 95 | Cadbury India Ltd., Nestle India Ltd., |



| | | | |
|--|---------|-----|---|
| Sugar-boiled confectionery | 80,000 | 280 | Parry's Confectionery, Nestle India Ltd. |
| Chewing /Bubble gum | 25,000 | 55 | Warner Lambert, Wrigley's Perfetti |
| Snack foods | | | |
| Traditional Indian snacks (incl. small players) | 310,000 | 295 | Haldiram's. Pepsi Foods |
| Western snacks (including branded potato chips = 5,000 metric tones) | 40,000 | 30 | Frito-Lay India, Uncle Chipps, Procter & Gamble |

Source: Promar International, 2001.Indian Food Industry,20(4), 29.

Changes in food processing

Government is at the forefront of forces for changes in the food processing industry and is also the least predictable of the forces. Other forces for change include the productivity of agriculture, the emergence of an organized food retail sector, improving infrastructure and the changing Indian food consumer (Fig.15.1)

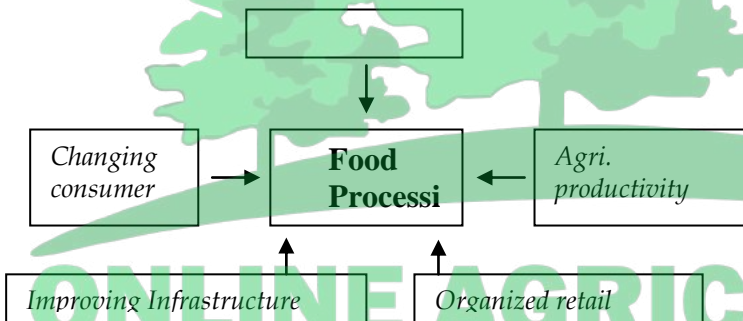


Fig. 15.1 Forces for change in Indian Food Processing Industry

The changing food consumer in India will be one of the most powerful forces for change in the food industry. Increasing incomes, literacy rates, small family sizes, women entering the work force, urbanization and increasing concern about health and hygiene will be motivating consumer changes in attitudes. Fig.15.2 depicts the markets for basic foods and processed food today and in the future, taking into account changing consumer attitudes. The triangles are not meant to be drawn to scale but illustrate an order of magnitude. These graphics also represent the markets for those Indians in the middle and upper income groups. Despite these changes, some consumer traits have not changed. For instance, the Indian consumer is still very price sensitive. Most Indians simply do not have enough money to lose this trait. Most Indians tend to save rather than spend money.

Priorities

The opportunities in food markets depend on market growth, market size, government influences and infrastructure bottlenecks (Table 15.2).

Food distribution in India

The flow chart (Fig15.3) depicts the distribution system in India. As the chart shows there are several middlemen/intermediaries / agents who come between the farmer and the consumer or food manufacturing company. Distribution of food products is also fragmented given the fact that food retailing in India is highly unorganized by small neighbourhood retailers and vendors. They are estimated to be over five million such small retail outlets in rural and urban India. These small retail outlets accounts for nearly 95 % of the total retail turn over in the country, and their number continue to grow despite a worldwide trend toward retail consolidation.

Large food markets or supermarkets are an emerging retail format, but only in metropolitan cities. According to USDA estimates there are between 50 and 100 privately owned supermarkets and about 350 convenience stores in all over India, and these stores only account for 1-2 % of food retail sales in urban areas of India.

Table 15.2. Priorities Basic food & Branded processed food



| Product | Market growth | Market size | Infrastructure bottlenecks | Government influence |
|-------------------------------|---------------|------------------|----------------------------|----------------------|
| <u>Basic food</u> | | | | |
| Wheat flour | High | Medium | Some | Some |
| Poultry | High | Large | Many | Some |
| Milk | High | Large | Some/ Many | Many |
| Fresh fruits & Vegetables | High | Large | Many | Some/ Many |
| Edible oils | Medium | Medium/ Large | Some | Some/ Many |
| <u>Branded processed food</u> | | | | |
| Bakery products | High | Large | Some/Few | Some |
| Indian dairy products | High | Large | Many / some | Many |
| Indian snacks | High | Large | Some | Some |
| Processed fruits & vegetables | Medium | Small/ Medium | Many | Some |
| Convenience foods | Medium / High | Small/ Medium | Some/Few | Some |
| Western dairy products | High | Medium | Many/some | Many |

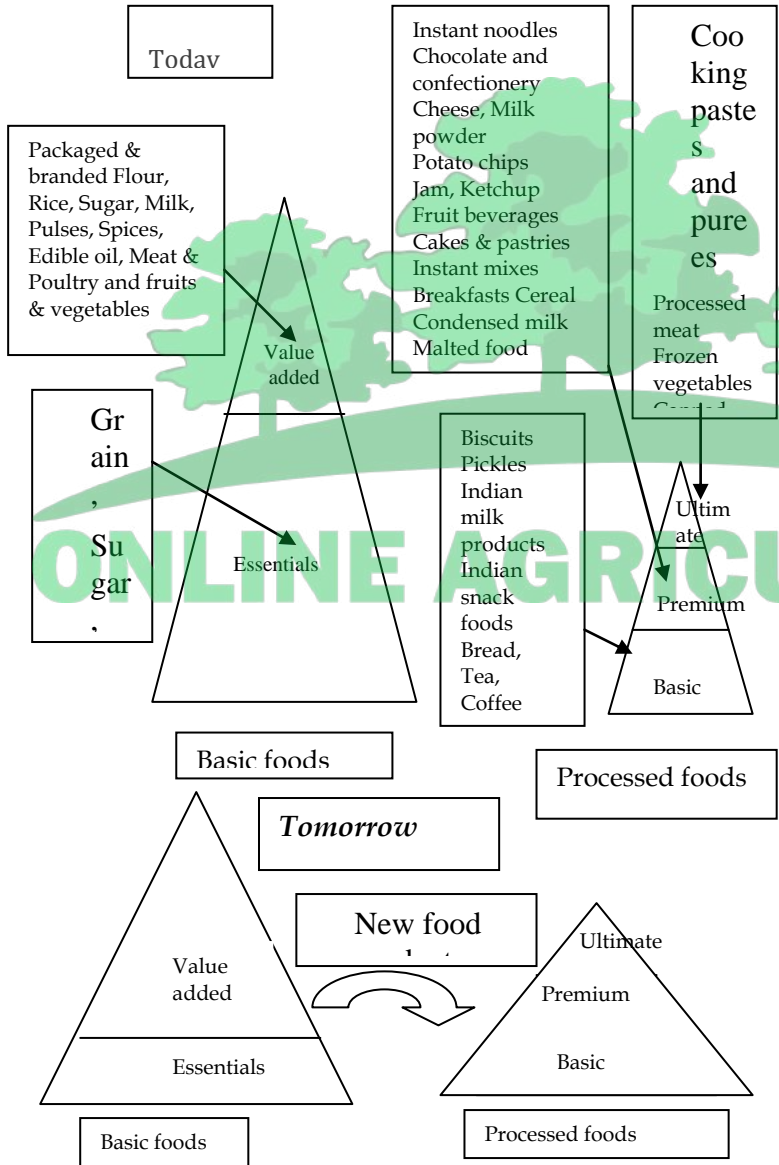


Fig.15.3 Indian Food Chain

