

Agribusiness Management and Trade



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Index

Module 1. Management Concepts & Principle	
Lesson 1. Basic Concepts of Management	5-13
Lesson 2. Management and Manager	14-18
Lesson 3. Managerial Environment	19-24
Lesson 4. The Decision-Making Process	25-29
Module 2. Management Functions	
Lesson 5. Planning	30-35
Lesson 6. Organising	36-43
Lesson 7. Staffing	44-50
Lesson 8. Leading and Leadership	51-55
Lesson 9. Controlling	56-61
Module 3. Marketing Management	
Lesson 10. Concepts of Marketing	62-66
Lesson 11. Marketing Environment	67-72
Lesson 12. Product Development and Product Lifecycle	73-76
Lesson 13. Product Pricing and Pricing Strategies	77-81
Lesson 14. Distribution Decisions	82-87
Lesson 15 Promotional Decisions	88-93
Module 4. Concepts and application of management principles to agribusiness	
Lesson 16 Nature and Characteristics of Agribusiness	94-98
Lesson- 17 Agro-based Industries in India	99-102
Lesson-18 Agricultural Supply Chain Management	103-109
Lesson-20 Strategic Management in Agribusiness	110-117
Lesson-21 Risk Management in Agribusiness	118-122
Lesson-22 Contract Farming	123-130
Lesson-23 ICT In Agribusiness	131-136
Module 5. Production, Consumption, Processing and Marketing of Agricultural Products	
Lesson-24 Agricultural Production Scenario in India	137-145

Lesson-25 Consumption of Agricultural Products	146-150
Lesson-26 Agricultural Marketing – Meaning & Importance	151-155
Lesson-27 Agricultural Marketing Functions	156-162
Lesson-28 Classification of Markets	163-167
Lesson-29 Agricultural Market Functionaries	168-172
Lesson-30 Regulated Agricultural Markets	173-177
Lesson-31 Cooperative Agricultural Marketing	178-183
Lesson-32 Producer Surplus of Agricultural Commodities	184-188
Lesson-33 Market Integration and Marketing Efficiency	189-192
Lesson-34 Marketing cost-margins-price spreads	193-197
Lesson-35 Food Processing Sector in India	198-203
Module 6. Meaning & Theories of International Trade	
Lesson-36 Meaning and Concept of International Business	204-209
Lesson-37 Absolute Advantage Theory of International Trade	210-214
Lesson-38 Comparative Advantage Theory of International Trade	215-218
Module 7. WTO provisions for trade in agricultural and food commodities	
Lesson-39 Understanding the WTO	219-223
Lesson-40 Agreements under WTO	224-228
Lesson-41 Agreement on Agriculture	229-233
Lesson-42 Food Safety Issues under WTO	234-238

Lesson 1. Basic Concepts of Management

1.1 INTRODUCTION

Management involves creating an internal environment: - It is the management which puts into use the various factors of production. Therefore, it is the responsibility of management to create such conditions which are conducive to maximum efforts so that people are able to perform their task efficiently and effectively. It includes ensuring availability of raw materials, determination of wages and salaries, formulation of rules & regulations etc.

Therefore, we can say that good management includes both being effective and efficient. Being effective means doing the appropriate task i.e, fitting the square pegs in square holes and round pegs in round holes. Being efficient means doing the task correctly, at least possible cost with minimum wastage of resources.

1.2 DEFINITION OF MANAGEMENT

Management can be defined in detail in following categories:

1. Management as a Process
2. Management as an Activity
3. Management as a Discipline
4. Management as a Group
5. Management as a Science
6. Management as an Art
7. Management as a Profession

1.2.1 Management as a Process

As a process, management refers to a series of inter - related functions. It is the process by which management creates, operates and directs purposive organization through systematic, coordinated and co-operated human efforts, according to George R. Terry, “Management is a distinct process consisting of planning, organizing, actuating and controlling, performed to determine and accomplish stated objective by the use of human beings and other resources”. As a process, management consists of three aspects:

1. **Management is a social process** - Since human factor is most important among the other factors, therefore management is concerned with developing relationship among people. It is the duty of management to make interaction between people - productive and useful for obtaining organizational goals.

2. **Management is an integrating process** - Management undertakes the job of bringing together human physical and financial resources so as to achieve organizational purpose. Therefore, is an important function to bring harmony between various factors.
3. **Management is a continuous process** - It is a never ending process. It is concerned with constantly identifying the problem and solving them by taking adequate steps. It is an on-going process.

1.2.2 Management as an Activity

Like various other activities performed by human beings such as writing, playing, eating, cooking etc, management is also an activity because a manager is one who accomplishes the objectives by directing the efforts of others. According to Koontz, “Management is what a manager does”. Management as an activity includes -

1. **Informational activities** - In the functioning of business enterprise, the manager constantly has to receive and give information orally or in written. A communication link has to be maintained with subordinates as well as superiors for effective functioning of an enterprise.
2. **Decisional activities** - Practically all types of managerial activities are based on one or the other types of decisions. Therefore, managers are continuously involved in decisions of different kinds since the decision made by one manager becomes the basis of action to be taken by other managers. (E.g. Sales Manager is deciding the media & content of advertising).
3. **Inter-personal activities** - Management involves achieving goals through people. Therefore, managers have to interact with superiors as well as the subordinates. They must maintain good relations with them. The inter-personal activities include with the sub-ordinates and taking care of the problem. (E.g. Bonuses to be given to the sub-ordinates).

1.2.3 Management as a Discipline

Management as a discipline refers to that branch of knowledge which is connected to study of principles & practices of basic administration. It specifies certain code of conduct to be followed by the manager & also various methods for managing resources efficiently.

Management as a discipline specifies certain code of conduct for managers & indicates various methods of managing an enterprise. Management is a course of study which is now formally being taught in the institutes and universities after completing a prescribed course or by obtaining degree or diploma in management, a person can get employment as a manager.

Any branch of knowledge that fulfills following two requirements is known as discipline:

1. There must be scholars & thinkers who communicate relevant knowledge through research and publications.
2. The knowledge should be formally imparted by education and training programmes.

Since management satisfies both these problems, therefore it qualifies to be a discipline. Though it is comparatively a new discipline but it is growing at a faster pace.

1.2.4 Management as a Group

Management as a group may be looked upon in 2 different ways:

1. All managers taken together.
2. Only the top management

The interpretation depends upon the context in which these terms are used. Broadly speaking, there are 3 types of managers -

1. **Patrimonial / Family Manager:** Those who have become managers by virtue of their being owners or relatives of the owners of company.
2. **Professional Managers:** Those who have been appointed on account of their specialized knowledge and degree.
3. **Political Managers / Civil Servants:** Those who manage public sector undertakings.

Managers have become a part of elite group of society as they enjoy higher standard of living in the society.

1.2.5 Management as a Science

Science is a systematic body of knowledge pertaining to a specific field of study that contains general facts which explains a phenomenon. It establishes cause and effect relationship between two or more variables and underlines the principles governing their relationship. These principles are developed through scientific method of observation and verification through testing.

Science is characterized by following main features:

1. **Universally acceptance principles** -Scientific principles represents basic truth about a particular field of enquiry. These principles may be applied in all situations, at all time & at all places. E.g. - law of gravitation which can be applied in all countries irrespective of the time. Management also contains some fundamental principles which can be applied universally like the Principle of Unity of Command i.e. one man, one boss. This principle is applicable to all type of organization - business or non business.
2. **Experimentation & Observation** - Scientific principles are derived through scientific investigation & researching i.e. they are based on logic. E.g. the

principle that earth goes round the sun has been scientifically proved. Management principles are also based on scientific enquiry & observation and not only on the opinion of Henry Fayol. They have been developed through experiments & practical experiences of large no. of managers. E.g. it is observed that fair remuneration to personal helps in creating a satisfied work force.

3. **Cause & Effect Relationship** - Principles of science lay down cause and effect relationship between various variables. E.g. when metals are heated, they are expanded. The cause is heating & result is expansion. The same is true for management, therefore it also establishes cause and effect relationship. E.g. lack of parity (balance) between authority & responsibility will lead to ineffectiveness. If you know the cause i.e. lack of balance, the effect can be ascertained easily i.e. in effectiveness. Similarly if workers are given bonuses, fair wages they will work hard but when not treated in fair and just manner, reduces productivity of organization.
4. **Test of Validity & Predictability** - Validity of scientific principles can be tested at any time or any number of times i.e. they stand the test of time. Each time these tests will give same result. Moreover future events can be predicted with reasonable accuracy by using scientific principles. E.g. H_2 & O_2 will always give H_2O . Principles of management can also be tested for validity. E.g. principle of unity of command can be tested by comparing two persons - one having single boss and one having 2 bosses. The performance of 1st person will be better than 2nd.

It cannot be denied that management has a systematic body of knowledge but it is not as exact as that of other physical sciences like biology, physics, and chemistry etc. The main reason for the inexactness of science of management is that it deals with human beings and it is very difficult to predict their behavior accurately. Since it is a social process, therefore it falls in the area of social sciences. It is a flexible science & that is why its theories and principles may produce different results at different times and therefore it is a behavior science. Ernest Dale has called it as a *Soft Science*.

1.2.6 Management as an Art

Art implies application of knowledge & skill to trying about desired results. An art may be defined as personalized application of general theoretical principles for achieving best possible results. Art has the following characters -

1. **Practical Knowledge:** Every art requires practical knowledge therefore learning of theory is not sufficient. It is very important to know practical application of theoretical principles. E.g. to become a good painter, the person may not only be knowing different colour and brushes but different designs, dimensions, situations etc to use them appropriately. A manager can never be successful just by obtaining degree or diploma in management; he must have also know how to apply various principles in real situations by functioning in capacity of manager.

2. **Personal Skill:** Although theoretical base may be same for every artist, but each one has his own style and approach towards his job. That is why the level of success and quality of performance differs from one person to another. E.g. there are several qualified painters but M.F. Hussain is recognized for his style. Similarly management as an art is also personalized. Every manager has his own way of managing things based on his knowledge, experience and personality, that is why some managers are known as good managers (like Aditya Birla, Rahul Bajaj) whereas others as bad.
3. **Creativity:** Every artist has an element of creativity in line. That is why he aims at producing something that has never existed before which requires combination of intelligence & imagination. Management is also creative in nature like any other art. It combines human and non-human resources in useful way so as to achieve desired results. It tries to produce sweet music by combining chords in an efficient manner.
4. **Perfection through practice:** Practice makes a man perfect. Every artist becomes more and more proficient through constant practice. Similarly managers learn through an art of trial and error initially but application of management principles over the years makes them perfect in the job of managing.
5. **Goal-Oriented:** Every art is result oriented as it seeks to achieve concrete results. In the same manner, management is also directed towards accomplishment of pre-determined goals. Managers use various resources like men, money, material, machinery & methods to promote growth of an organization.

Thus, we can say that management is an art therefore it requires application of certain principles rather it is an art of highest order because it deals with moulding the attitude and behavior of people at work towards desired goals.

Management as both Science and Art

Management is both an art and a science. The above mentioned points clearly reveal that management combines features of both science as well as art. It is considered as a science because it has an organized body of knowledge which contains certain universal truth. It is called an art because managing requires certain skills which are personal possessions of managers. Science provides the knowledge & art deals with the application of knowledge and skills.

A manager to be successful in his profession must acquire the knowledge of science & the art of applying it. Therefore management is a judicious blend of science as well as an art because it proves the principles and the way these principles are applied is a matter of art. Science teaches to 'know' and art teaches to 'do'. E.g. a person cannot become a good singer unless he has knowledge about various ragas & he also applies his personal skill in the art of singing. Same way it is not sufficient for manager to first know the principles but he must also apply them in solving

various managerial problems that is why, science and art are not mutually exclusive but they are complementary to each other (like tea and biscuit, bread and butter etc.).

The old saying that “Manager are Born” has been rejected in favor of “Managers are Made”. It has been aptly remarked that management is the oldest of art and youngest of science. To conclude, we can say that science is the root and art is the fruit.

1.2.7 Management as a Profession

Over a large few decades, factors such as growing size of business unit, separation of ownership from management, growing competition etc have led to an increased demand for professionally qualified managers. The task of manager has been quite specialized. As a result of these developments the management has reached a stage where everything is to be managed professionally.

A profession may be defined as an occupation that requires specialized knowledge and intensive academic preparations to which entry is regulated by a representative body. The essentials of a profession are:

1. **Specialized Knowledge** - A profession must have a systematic body of knowledge that can be used for development of professionals. Every professional must make deliberate efforts to acquire expertise in the principles and techniques. Similarly a manager must have devotion and involvement to acquire expertise in the science of management.
2. **Formal Education & Training** - There are no. of institutes and universities to impart education & training for a profession. No one can practice a profession without going through a prescribed course. Many institutes of management have been set up for imparting education and training. For example, a CA cannot audit the A/C's unless he has acquired a degree or diploma for the same but no minimum qualifications and a course of study has been prescribed for managers by law. For example, MBA may be preferred but not necessary.
3. **Social Obligations** - Profession is a source of livelihood but professionals are primarily motivated by the desire to serve the society. Their actions are influenced by social norms and values. Similarly a manager is responsible not only to its owners but also to the society and therefore he is expected to provide quality goods at reasonable prices to the society.
4. **Code of Conduct** - Members of a profession have to abide by a code of conduct which contains certain rules and regulations, norms of honesty, integrity and special ethics. A code of conduct is enforced by a representative association to ensure self-discipline among its members. Any member violating the code of conduct can be punished and his membership can be withdrawn. The AIMA has prescribed a code of conduct for managers but it has no right to take legal action against any manager who violates it.
5. **Representative Association** - For the regulation of profession, existence of a representative body is a must. For example, an institute of Chartered Accountants

of India establishes and administers standards of competence for the auditors but the AIMA however does not have any statutory powers to regulate the activities of managers.

From above discussion, it is quite clear that management fulfills several essentials of a profession, even then it is not a full fledged profession because: -

1. It does not restrict the entry in managerial jobs for account of one standard or other.
2. No minimum qualifications have been prescribed for managers.
3. No management association has the authority to grant a certificate of practice to various managers.
4. All managers are supposed to abide by the code formulated by AIMA,
5. Competent education and training facilities do not exist.
6. Managers are responsible to many groups such as shareholders, employees and society. A regulatory code may curtail their freedom.
7. Managers are known by their performance and not mere degrees.
8. The ultimate goal of business is to maximize profit and not social welfare. That is why Haymes has rightly remarked, "The slogan for management is becoming - 'He who serves best, also profits most'."

1.3 FEATURES OF MANAGEMENT

Management is an activity concerned with guiding human and physical resources such that organizational goals can be achieved. Nature of management can be highlighted as: -

1. **Management is Goal-Oriented:** The success of any management activity is accessed by its achievement of the predetermined goals or objective. Management is a purposeful activity. It is a tool which helps use of human & physical resources to fulfill the pre-determined goals. For example, the goal of an enterprise is maximum consumer satisfaction by producing quality goods and at reasonable prices. This can be achieved by employing efficient persons and making better use of scarce resources.
2. **Management integrates Human, Physical and Financial Resources:** In an organization, human beings work with non-human resources like machines. Materials, financial assets, buildings etc. Management integrates human efforts to those resources. It brings harmony among the human, physical and financial resources.
3. **Management is Continuous:** Management is an ongoing process. It involves continuous handling of problems and issues. It is concerned with identifying the problem and taking appropriate steps to solve it. E.g. the target of a company is maximum production. For achieving this target various policies have to be framed

but this is not the end. Marketing and Advertising is also to be done. For this policies have to be again framed. Hence this is an ongoing process.

4. **Management is all Pervasive:** Management is required in all types of organizations whether it is political, social, cultural or business because it helps and directs various efforts towards a definite purpose. Thus clubs, hospitals, political parties, colleges, hospitals, business firms all require management. When ever more than one person is engaged in working for a common goal, management is necessary. Whether it is a small business firm which may be engaged in trading or a large firm like Tata Iron & Steel, management is required everywhere irrespective of size or type of activity.
5. **Management is a Group Activity:** Management is very much less concerned with individual's efforts. It is more concerned with groups. It involves the use of group effort to achieve predetermined goal of management of ABC & Co. is good refers to a group of persons managing the enterprise.

1.4 IMPORTANCE OF MANAGEMENT

- **It helps in Achieving Group Goals** - It arranges the factors of production, assembles and organizes the resources, integrates the resources in effective manner to achieve goals. It directs group efforts towards achievement of pre-determined goals. By defining objective of organization clearly there would be no wastage of time, money and effort. Management converts disorganized resources of men, machines, money etc. into useful enterprise. These resources are coordinated, directed and controlled in such a manner that enterprise work towards attainment of goals.
- **Optimum Utilization of Resources** - Management utilizes all the physical & human resources productively. This leads to efficacy in management. Management provides maximum utilization of scarce resources by selecting its best possible alternate use in industry from out of various uses. It makes use of experts, professional and these services leads to use of their skills, knowledge, and proper utilization and avoids wastage. If employees and machines are producing its maximum there is no under employment of any resources.
- **Reduces Costs** - It gets maximum results through minimum input by proper planning and by using minimum input & getting maximum output. Management uses physical, human and financial resources in such a manner which results in best combination. This helps in cost reduction.
- **Establishes Sound Organization** - No overlapping of efforts (smooth and coordinated functions). To establish sound organizational structure is one of the objective of management which is in tune with objective of organization and for fulfillment of this, it establishes effective authority & responsibility relationship i.e. who is accountable to whom, who can give instructions to whom, who are superiors & who are subordinates. Management fills up various positions with right persons, having right skills, training and qualification. All jobs should be cleared to everyone.

- **Establishes Equilibrium** - It enables the organization to survive in changing environment. It keeps in touch with the changing environment. With the change in external environment, the initial co-ordination of organization must be changed. So it adapts organization to changing demand of market / changing needs of societies. It is responsible for growth and survival of organization.
- **Essentials for Prosperity of Society** - Efficient management leads to better economical production which helps in turn to increase the welfare of people. Good management makes a difficult task easier by avoiding wastage of scarce resource. It improves standard of living. It increases the profit which is beneficial to business and society will get maximum output at minimum cost by creating employment opportunities which generate income in hands. Organization comes with new products and researches beneficial for society.

Lesson 2. Management and Manager

2.1 INTRODUCTION

In today's tough and uncertain economy, a company needs strong managers to lead its staff toward accomplishing business goals. But managers are more than just leaders — they're problem solvers, cheerleaders, and planners as well. And managers don't come in one-size-fits-all shapes or forms. Managers fulfil many roles and have many different responsibilities at each level of management within an organization.

2.2 MANAGEMENT AND ORGANIZATIONS

Organizations abound in today's society. Groups of individuals constantly join forces to accomplish common goals. Sometimes the goals of these organizations are for profit, such as franchise restaurant chains or clothing retailers. Other times, the goals are more altruistic, such as non-profit churches or public schools. But no matter what their aims, all these organizations share two things in common: They're made up of people, and certain individuals are in charge of these people.

Enter managers. **Managers** appear in every organization — at least in organizations that want to succeed. These individuals have the sometimes-unenviable task of making decisions, solving difficult problems, setting goals, planning strategies, and rallying individuals. And those are just a few of their responsibilities!

To be exact, managers administer and coordinate resources effectively and efficiently to achieve the goals of an organization. In essence, managers get the job done through other people.

2.3 THE INTRICACIES OF MANAGEMENT

No matter what type of organization they work in, managers are generally responsible for a group of individuals' performance. As leaders, managers must encourage this group to reach common business goals, such as bringing a new product to market in a timely fashion. To accomplish these goals, managers not only use their human resources, but they also take advantage of various material resources as well, such as technology.

Think of a team, for example. A manager may be in charge of a certain department whose task it is to develop a new product. The manager needs to coordinate the efforts of his department's team members, as well as give them the material tools they need to accomplish the job well. If the team fails, ultimately it is the manager who shoulders the responsibility.

2.4 LEVELS OF MANAGEMENT

Two leaders may serve as managers within the same company but have very different titles and purposes. Large organizations, in particular, may break down management into different levels because so many more people need to be managed. Typical management levels fall into the following categories:

- **Top level:** Managers at this level ensure that major performance objectives are established and accomplished. Common job titles for top managers include chief executive officer (CEO), chief operating officer (COO), president, and vice president. These senior managers are considered executives, responsible for the performance of an organization as a whole or for one of its significant parts.
- **Middle level:** Middle managers report to top managers and are in charge of relatively large departments or divisions consisting of several smaller units. Examples of middle managers include clinic directors in hospitals; deans in universities; and division managers, plant managers, and branch sales managers in businesses. Middle managers develop and implement action plans consistent with company objectives, such as increasing market presence.
- **Low level:** The initial management job that most people attain is typically a **first-line management** position, such as a team leader or supervisor — a person in charge of smaller work units composed of hands-on workers. Job titles for these first-line managers vary greatly, but include such designations as department head, group leader, and unit leader. First-line managers ensure that their work teams or units meet performance objectives, such as producing a set number of items at a given quality, that are consistent with the plans of middle and top management.

2.5 FUNCTIONS OF MANAGERS

Managers just don't go out and haphazardly perform their responsibilities. Good managers discover how to master five basic functions: planning, organizing, staffing, leading, and controlling.

- **Planning:** This step involves mapping out exactly how to achieve a particular goal. Say, for example, that the organization's goal is to improve company sales. The manager first needs to decide which steps are necessary to accomplish that goal. These steps may include increasing advertising, inventory, and sales staff. These necessary steps are developed into a plan. When the plan is in place, the manager can follow it to accomplish the goal of improving company sales.
- **Organizing:** After a plan is in place, a manager needs to organize her team and materials according to her plan. Assigning work and granting authority are two important elements of organizing.
- **Staffing:** After a manager discerns his area's needs, he may decide to beef up his staffing by recruiting, selecting, training, and developing employees. A manager in a large organization often works with the company's human resources department to accomplish this goal.

- **Leading:** A manager needs to do more than just plan, organize, and staff her team to achieve a goal. She must also lead. Leading involves motivating, communicating, guiding, and encouraging. It requires the manager to coach, assist, and problem solve with employees.
- **Controlling:** After the other elements are in place, a manager's job is not finished. He needs to continuously check results against goals and take any corrective actions necessary to make sure that his area's plans remain on track.

All managers at all levels of every organization perform these functions, but the amount of time a manager spends on each one depends on both the level of management and the specific organization.

2.6 ROLES PERFORMED BY MANAGERS

A manager wears many hats. Not only is a manager a team leader, but he or she is also a planner, organizer, cheerleader, coach, problem solver, and decision maker — all rolled into one. And these are just a few of a manager's roles.

In addition, managers' schedules are usually jam-packed. Whether they're busy with employee meetings, unexpected problems, or strategy sessions, managers often find little spare time on their calendars. (And that doesn't even include responding to e-mail!)

In his classic book, *The Nature of Managerial Work*, Henry Mintzberg describes a set of ten roles that a manager fills. These roles fall into three categories:

- **Interpersonal:** This role involves human interaction.
- **Informational:** This role involves the sharing and analyzing of information.
- **Decisional:** This role involves decision making.

Table 2.1 contains a more in-depth look at each category of roles that help managers carry out all five functions described in the preceding “Functions of Managers” section.

TABLE 2.1 Mintzberg's Set of Ten Roles

Category	Role	Activity
Informational	Monitor	Seek and receive information; scan periodicals and reports; maintain contact with stakeholders.
	Disseminator	Forward information to organization members via memos, reports, and calls.
	Spokesperson	Transmit information to outsiders via reports, memos, and speeches.

Category	Role	Activity
Interpersonal	Figurehead	Perform ceremonial and symbolic duties, such as greeting visitors, signing legal documents.
	Leader	Direct and motivate subordinates; counsel and communicate with them.
	Liaison	Maintain information links both inside and outside organization through phone calls, and meetings.
Decisional	Entrepreneur	Initiate improvement projects; identify new ideas and delegate tasks to others.
	Disturbance handler	Take corrective action during disputes or crises; resolve conflicts between subordinates; adapt to environments.
	Resource allocator	Decide who gets resources; prepare budgets; set schedules and priorities.
	Negotiator	Represent department during negotiations of union contracts, salaries, and budgets.

2.7 SKILLS NEEDED BY MANAGERS

Not everyone can be a manager. Certain **skills**, or abilities to translate knowledge into action that results in desired performance, are required to help other employees become more productive. These skills fall under the following categories:

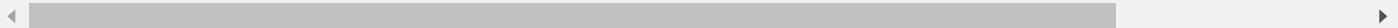
- **Technical:** This skill requires the ability to use a special proficiency or expertise to perform particular tasks. Accountants, engineers, market researchers, and computer scientists, as examples, possess technical skills. Managers acquire these skills initially through formal education and then further develop them through training and job experience. Technical skills are most important at lower levels of management.
- **Human:** This skill demonstrates the ability to work well in cooperation with others. Human skills emerge in the workplace as a spirit of trust, enthusiasm, and genuine involvement in interpersonal relationships. A manager with good human skills has a high degree of self-awareness and a capacity to understand or empathize with the feelings of others. Some managers are naturally born with great human skills, while others improve their skills through classes or experience. No matter how human skills are acquired, they're critical for all managers because of the highly interpersonal nature of managerial work.

- **Conceptual:** This skill calls for the ability to think analytically. Analytical skills enable managers to break down problems into smaller parts, to see the relations among the parts, and to recognize the implications of any one problem for others. As managers assume ever-higher responsibilities in organizations, they must deal with more ambiguous problems that have long-term consequences. Again, managers may acquire these skills initially through formal education and then further develop them by training and job experience. The higher the management level, the more important conceptual skills become.

Although all three categories contain skills essential for managers, their relative importance tends to vary by level of managerial responsibility.

Business and management educators are increasingly interested in helping people acquire technical, human, and conceptual skills, and develop specific competencies, or specialized skills that contribute to high performance in a management job. Following are some of the skills and personal characteristics that the American Assembly of Collegiate Schools of Business (AACSB) is urging business schools to help their students develop.

- **Leadership** — ability to influence others to perform tasks
- **Self-objectivity** — ability to evaluate yourself realistically
- **Analytic thinking** — ability to interpret and explain patterns in information
- **Behavioral flexibility** — ability to modify personal behavior to react objectively rather than subjectively to accomplish organizational goals
- **Oral communication** — ability to express ideas clearly in words
- **Written communication** — ability to express ideas clearly in writing
- **Personal impact** — ability to create a good impression and instill confidence
- **Resistance to stress** — ability to perform under stressful conditions
- **Tolerance for uncertainty** — ability to perform in ambiguous situations



Lesson 3. Managerial Environment

3.1 INTRODUCTION

A manager's environment is made up of constantly changing factors — both external and internal — that affects the operation of the organization. If a new competitor appears in the marketplace, the managerial environment is affected. If key clients take their business elsewhere, managers feel the impact. And if technological advances date an organization's current methods of doing business, once again, the managerial environment has to adapt.

Although managers can't always control their environments, they need to be aware of any changes that occur, because changes ultimately affect their daily decisions and actions. For example, in the airline industry, deregulation opened up the market to new airlines, forcing existing airlines to be more competitive. Managers in existing airlines couldn't afford to ignore the cheaper airfares and increased service that resulted. Not only did managers have to identify the new challenge, but they also had to act quickly and efficiently to remain competitive.

3.2 THE EXTERNAL ENVIRONMENT

All outside factors that may affect an organization make up the external environment. The external environment is divided into two parts:

- **Directly interactive:** This environment has an immediate and firsthand impact upon the organization. A new competitor entering the market is an example.
- **Indirectly interactive:** This environment has a secondary and more distant effect upon the organization. New legislation taking effect may have a great impact. For example, complying with the Americans with Disabilities Act requires employers to update their facilities to accommodate those with disabilities.

3.2.1 Directly interactive forces: Directly interactive forces include owners, customers, suppliers, competitors, employees, and employee unions. Management has a responsibility to each of these groups. Here are some examples:

- **Owners** expect managers to watch over their interests and provide a return on investments.
- **Customers** demand satisfaction with the products and services they purchase and use.
- **Suppliers** require attentive communication, payment, and a strong working relationship to provide needed resources.
- **Competitors** present challenges as they vie for customers in a marketplace with similar products or services.

- **Employees and employee unions** provide both the people to do the jobs and the representation of work force concerns to management.

3.2.2 Indirectly interactive forces

The second type of external environment is the indirectly interactive forces. These forces include sociocultural, political and legal, technological, economic, and global influences. Indirectly interactive forces may impact one organization more than another simply because of the nature of a particular business. For example, a company that relies heavily on technology will be more affected by software updates than a company that uses just one computer. Although somewhat removed, indirect forces are still important to the interactive nature of an organization.

The sociocultural dimension is especially important because it determines the goods, services, and standards that society values. The sociocultural force includes the demographics and values of a particular customer base.

- **Demographics** are measures of the various characteristics of the people and social groups who make up a society. Age, gender, and income are examples of commonly used demographic characteristics.
- **Values** refer to certain beliefs that people have about different forms of behavior or products. Changes in how a society values an item or a behavior can greatly affect a business. (Think of all the fads that have come and gone!)

The political and legal dimensions of the external environment include regulatory parameters within which an organization must operate. Political parties create or influence laws, and business owners must abide by these laws. Tax policies, trade regulations, and minimum wage legislation are just a few examples of political and legal issues that may affect the way an organization operates.

The technological dimension of the external environment impacts the scientific processes used in changing inputs (resources, labor, money) to outputs (goods and services). The success of many organizations depends on how well they identify and respond to external technological changes.

For example, one of the most significant technological dimensions of the last several decades has been the increasing availability and affordability of management information systems (also known as MIS). Through these systems, managers have access to information that can improve the way they operate and manage their businesses.

The economic dimension reflects worldwide financial conditions. Certain economic conditions of special concern to organizations include interest rates, inflation, unemployment rates, gross national product, and the value of the U.S. dollar against other currencies.

A favorable economic climate generally represents opportunities for growth in many industries, such as sales of clothing, jewelry, and new cars. But some businesses

traditionally benefit in poor economic conditions. The alcoholic beverage industry, for example, traditionally fares well during times of economic downturn.

The global dimension of the environment refers to factors in other countries that affect U.S. organizations. Although the basic management functions of planning, organizing, staffing, leading, and controlling are the same whether a company operates domestically or internationally, managers encounter difficulties and risks on an international scale. Whether it be unfamiliarity with language or customs or a problem within the country itself (think mad cow disease), managers encounter global risks that they probably wouldn't have encountered if they had stayed on their own shores.

3.3 THE INTERNAL ENVIRONMENT

An organization's internal environment is composed of the elements within the organization, including current employees, management, and especially corporate culture, which defines employee behavior. Although some elements affect the organization as a whole, others affect only the manager. A manager's philosophical or leadership style directly impacts employees. Traditional managers give explicit instructions to employees, while progressive managers empower employees to make many of their own decisions. Changes in philosophy and/or leadership style are under the control of the manager. The following sections describe some of the elements that make up the internal environment

3.4 ORGANIZATIONAL MISSION STATEMENTS

An organization's **mission statement** describes what the organization stands for and why it exists. It explains the overall purpose of the organization and includes the attributes that distinguish it from other organizations of its type.

A mission statement should be more than words on a piece of paper; it should reveal a company's philosophy, as well as its purpose. This declaration should be a living, breathing document that provides information and inspiration for the members of the organization. A mission statement should answer the questions, “What are our values?” and “What do we stand for?” This statement provides focus for an organization by rallying its members to work together to achieve its common goals.

But not all mission statements are effective in America's businesses. Effective mission statements lead to effective efforts. In today's quality-conscious and highly competitive environments, an effective mission statement's purpose is centered on serving the needs of customers. A good mission statement is precise in identifying the following intents of a company:

- **Customers** — who will be served
- **Products/services** — what will be produced
- **Location** — where the products/services will be produced
- **Philosophy** — what ideology will be followed

3.5 COMPANY POLICIES

Company policies are guidelines that govern how certain organizational situations are addressed. Just as colleges maintain policies about admittance, grade appeals, prerequisites, and waivers, companies establish policies to provide guidance to managers who must make decisions about circumstances that occur frequently within their organization. Company policies are an indication of an organization's personality and should coincide with its mission statement.

3.6 FORMAL STRUCTURES

The **formal structure** of an organization is the hierarchical arrangement of tasks and people. This structure determines how information flows within the organization, which departments are responsible for which activities, and where the decision-making power rests.

Some organizations use a chart to simplify the breakdown of its formal structure. This **organizational chart** is a pictorial display of the official lines of authority and communication within an organization.

3.7 ORGANIZATIONAL CULTURES

The **organizational culture** is an organization's personality. Just as each person has a distinct personality, so does each organization. The culture of an organization distinguishes it from others and shapes the actions of its members.

Four main components make up an organization's culture:

- Values
- Heroes
- Rites and rituals
- Social network

Values are the basic beliefs that define employees' successes in an organization. For example, many universities place high values on professors being published. If a faculty member is published in a professional journal, for example, his or her chances of receiving tenure may be enhanced. The university wants to ensure that a published professor stays with the university for the duration of his or her academic career — and this professor's ability to write for publications is a value.

The second component is heroes. A hero is an exemplary person who reflects the image, attitudes, or values of the organization and serves as a role model to other employees. A hero is sometimes the founder of the organization (think Sam Walton of Wal-Mart). However, the hero of a company doesn't have to be the founder; it can be an everyday worker, such as hard-working paralegal Erin Brockovich, who had a tremendous impact on the organization.

Rites and rituals, the third component, are routines or ceremonies that the company uses to recognize high-performing employees. Awards banquets, company gatherings, and quarterly meetings can acknowledge distinguished employees for outstanding service. The honorees are meant to exemplify and inspire all employees of the company during the rest of the year.

The final component, the social network, is the informal means of communication within an organization. This network, sometimes referred to as the company grapevine, carries the stories of both heroes and those who have failed. It is through this network that employees really learn about the organization's culture and values.

3.8 ORGANIZATIONAL CLIMATES

A byproduct of the company's culture is the **organizational climate**. The overall tone of the workplace and the morale of its workers are elements of daily climate. Worker attitudes dictate the positive or negative “atmosphere” of the workplace. The daily relationships and interactions of employees are indicative of an organization's climate.

3.9 RESOURCES

Resources are the people, information, facilities, infrastructure, machinery, equipment, supplies, and finances at an organization's disposal. People are the paramount resource of all organizations. Information, facilities, machinery equipment, materials, supplies, and finances are supporting, nonhuman resources that complement workers in their quests to accomplish the organization's mission statement. The availability of resources and the way that managers value the human and nonhuman resources impact the organization's environment.

3.10 MANAGERIAL PHILOSOPHIES

Philosophy of management is the manager's set of personal beliefs and values about people and work and as such, is something that the manager can control. McGregor emphasized that a manager's philosophy creates a self-fulfilling prophecy. Theory X managers treat employees almost as children who need constant direction, while Theory Y managers treat employees as competent adults capable of participating in work-related decisions. These managerial philosophies then have a subsequent effect on employee behavior, leading to the self-fulfilling prophecy. As a result, organizational philosophies and managerial philosophies need to be in harmony.

3.11 MANAGERIAL LEADERSHIP STYLES

The number of coworkers involved within a problem-solving or decision-making process reflects the manager's leadership style. Empowerment means delegating to subordinates decision-making authority, freedom, knowledge, autonomy, and skills. Fortunately, most organizations and managers are making the move toward the active participation and teamwork that empowerment entails.

When guided properly, an empowered workforce may lead to heightened productivity and quality, reduced costs, more innovation, improved customer service, and greater commitment from the employees of the organization. In addition, response time may improve, because information and decisions need not be passed up and down the hierarchy. Empowering employees makes good sense because employees closest to the actual problem to be solved or the customer to be served can make the necessary decisions more easily than a supervisor or manager removed from the scene.

3.12 ADAPTING TO ENVIRONMENTS

The role of a manager is to monitor and shape the internal and external environments and to anticipate changes and react quickly to them.

Managers can monitor the environments through **boundary spanning** — a process of gathering information about developments that could impact the future of the organization. Managers can access information through a variety of sources: customer and supplier feedback; professional, trade, and government publications; industry associations; and personal contacts.

Managers can also actively work to influence their external environments through lobbying, voting, and using the media to influence public opinion.

Internal elements comprise the organization itself. Internal change arises from activities and decisions within the organization. Managers can gather information by conducting a thorough evaluation of the internal operations of the organization. The purpose of this internal analysis is to identify the organizational assets, resources, skills, and processes that represent either strengths or weaknesses. Strengths are aspects of the organization's operations that represent potential **competitive advantages** (any aspect of an organization that distinguishes it from its competitors in a positive way), while weaknesses are areas that are in need of improvement.

Several key areas of the organization's operations should be examined in an internal analysis. Key areas to be assessed include the marketing, financial, research and development, production, and general management capabilities. These areas are typically evaluated in terms of the extents to which they foster quality and support the competitive advantage sought by the organization.

Lesson 4. The Decision-Making Process**4.1 INTRODUCTION**

Quite literally, organizations operate by people making decisions. A manager plans, organizes, staffs, leads, and controls her team by executing decisions. The effectiveness and quality of those decisions determine how successful a manager will be. Managers are constantly called upon to make decisions in order to solve problems. Decision making and problem solving are ongoing processes of evaluating situations or problems, considering alternatives, making choices, and following them up with the necessary actions. Sometimes the decision-making process is extremely short, and mental reflection is essentially instantaneous. In other situations, the process can drag on for weeks or even months.

4.2 STEPS INVOLVED IN DECISION MAKING PROCESS

The entire decision-making process is dependent upon the right information being available to the right people at the right times.

The decision-making process involves the following steps:

1. Define the problem.
2. Identify limiting factors.
3. Develop potential alternatives.
4. Analyze the alternatives.
5. Select the best alternative.
6. Implement the decision.
7. Establish a control and evaluation system.

4.2.1 Define the problem

The decision-making process begins when a manager identifies the real problem. The accurate definition of the problem affects all the steps that follow; if the problem is inaccurately defined, every step in the decision-making process will be based on an incorrect starting point. One way that a manager can help determine the true problem in a situation is by identifying the problem separately from its symptoms.

The most obviously troubling situations found in an organization can usually be identified as symptoms of underlying problems. (See Table 4.1 for some examples of symptoms.) These symptoms all indicate that something is wrong with an organization, but they don't identify root causes. A successful manager doesn't just attack symptoms; he works to uncover the factors that cause these symptoms.

TABLE 4.1 Symptoms and Their Real Causes

Symptoms	Underlying Problem
Low profits and/or declining sales	Poor market research
High costs	Poor design process; poorly trained employees
Low morale	Lack of communication between management and subordinates
High employee turnover	Rate of pay too low; job design not suitable
High rate of absenteeism	Employees believe that they are not valued

4.2.2 Identify limiting factors

All managers want to make the best decisions. To do so, managers need to have the ideal resources — information, time, personnel, equipment, and supplies — and identify any limiting factors. Realistically, managers operate in an environment that normally doesn't provide ideal resources. For example, they may lack the proper budget or may not have the most accurate information or any extra time. So, they must choose to **satisfice** — to make the best decision possible with the information, resources, and time available.

4.2.3 Develop potential alternatives

Time pressures frequently cause a manager to move forward after considering only the first or most obvious answers. However, successful problem solving requires thorough examination of the challenge, and a quick answer may not result in a permanent solution. Thus, a manager should think through and investigate several alternative solutions to a single problem before making a quick decision.

One of the best known methods for developing alternatives is through **brainstorming**, where a group works together to generate ideas and alternative solutions. The assumption behind brainstorming is that the group dynamic stimulates thinking — one person's ideas, no matter how outrageous, can generate ideas from the others in the group. Ideally, this spawning of ideas is contagious, and before long, lots of suggestions and ideas flow. Brainstorming usually requires 30 minutes to an hour.

Nominal group technique. This method involves the use of a highly structured meeting, complete with an agenda, and restricts discussion or interpersonal communication during the decision-making process. This technique is useful because it ensures that every

group member has equal input in the decision making process. It also avoids some of the

group member has equal input in the decision-making process. It also avoids some of the pitfalls, such as pressure to conform, group dominance, hostility, and conflict, that can plague a more interactive, spontaneous, unstructured forum such as brainstorming.

Delphi technique. With this technique, participants never meet, but a group leader uses written questionnaires to conduct the decision making.

No matter what technique is used, group decision making has clear advantages and disadvantages when compared with individual decision making. The following are among the advantages:

- Groups provide a broader perspective.
- Employees are more likely to be satisfied and to support the final decision.
- Opportunities for discussion help to answer questions and reduce uncertainties for the decision makers.

These points are among the disadvantages:

- This method can be more time-consuming than one individual making the decision on his own.
- The decision reached could be a compromise rather than the optimal solution.
- Individuals become guilty of groupthink — the tendency of members of a group to conform to the prevailing opinions of the group.
- Groups may have difficulty performing tasks because the group, rather than a single individual, makes the decision, resulting in confusion when it comes time to implement and evaluate the decision.

The results of dozens of individual-versus-group performance studies indicate that groups not only tend to make better decisions than a person acting alone, but also that groups tend to inspire star performers to even higher levels of productivity.

So, are two (or more) heads better than one? The answer depends on several factors, such as the nature of the task, the abilities of the group members, and the form of interaction. Because a manager often has a choice between making a decision independently or including others in the decision making, she needs to understand the advantages and disadvantages of group decision making.

4.2.4 Analyze the alternatives

The purpose of this step is to decide the relative merits of each idea. Managers must identify the advantages and disadvantages of each alternative solution before making a final decision.

Evaluating the alternatives can be done in numerous ways. Here are a few possibilities:

- Determine the pros and cons of each alternative.
- Perform a cost-benefit analysis for each alternative.

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- Weight each factor important in the decision, ranking each alternative relative to its ability to meet each factor, and then multiply by a probability factor to provide a final value for each alternative.

Regardless of the method used, a manager needs to evaluate each alternative in terms of its

- **Feasibility** — can it be done?
- **Effectiveness** — how well does it resolve the problem situation?
- **Consequences** — what will be its costs (financial and nonfinancial) to the organization?

4.2.5 Select the best alternative

After a manager has analyzed all the alternatives, she must decide on the best one. The best alternative is the one that produces the most advantages and the fewest serious disadvantages. Sometimes, the selection process can be fairly straightforward, such as the alternative with the most pros and fewest cons. Other times, the optimal solution is a combination of several alternatives.

Sometimes, though, the best alternative may not be obvious. That's when a manager must decide which alternative is the most feasible and effective, coupled with which carries the lowest costs to the organization. (See the preceding section.) Probability estimates, where analysis of each alternative's chances of success takes place, often come into play at this point in the decision-making process. In those cases, a manager simply selects the alternative with the highest probability of success.

4.2.6 Implement the decision

Managers are paid to make decisions, but they are also paid to get results from these decisions. Positive results must follow decisions. Everyone involved with the decision must know his or her role in ensuring a successful outcome. To make certain that employees understand their roles, managers must thoughtfully devise programs, procedures, rules, or policies to help aid them in the problem-solving process.

4.2.7 Establish a control and evaluation system

Ongoing actions need to be monitored. An evaluation system should provide feedback on how well the decision is being implemented, what the results are, and what adjustments are necessary to get the results that were intended when the solution was chosen.

In order for a manager to evaluate his decision, he needs to gather information to determine its effectiveness. Was the original problem resolved? If not, is he closer to the desired situation than he was at the beginning of the decision-making process?

If a manager's plan hasn't resolved the problem, he needs to figure out what went wrong.

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A manager may accomplish this by asking the following questions:

- **Was the wrong alternative selected?** If so, one of the other alternatives generated in the decision-making process may be a wiser choice.
- **Was the correct alternative selected, but implemented improperly?** If so, a manager should focus attention solely on the implementation step to ensure that the chosen alternative is implemented successfully.
- **Was the original problem identified incorrectly?** If so, the decision-making process needs to begin again, starting with a revised identification step.
- **Has the implemented alternative been given enough time to be successful?** If not, a manager should give the process more time and re-evaluate at a later date.

Lesson 5. Planning

5.1 INTRODUCTION

Of the five management functions — planning, organizing, staffing, leading and controlling — planning is the most fundamental. All other functions stem from planning. However, planning doesn't always get the attention that it deserves; when it does, many managers discover that the planning process isn't as easy as they thought it would be — or that even the best-laid plans can go awry.

Before a manager can tackle any of the other functions, he or she must first devise a plan. A **plan** is a blueprint for goal achievement that specifies the necessary resource allocations, schedules, tasks, and other actions.

A goal is a desired future state that the organization attempts to realize. Goals are important because an organization exists for a purpose, and goals define and state that purpose. Goals specify future ends; plans specify today's means.

5.2 MEANING OF PLANNING:

The word **planning** incorporates both ideas: It means determining the organization's goals and defining the means for achieving them. Planning allows managers the opportunity to adjust to the environment instead of merely reacting to it. Planning increases the possibility of survival in business by actively anticipating and managing the risks that may occur in the future.

In short, planning is preparing for tomorrow, today. It's the activity that allows managers to determine what they want and how they will achieve it.

Not only does planning provide direction and a unity of purpose for organizations, it also answers six basic questions in regard to any activity:

- What needs to be accomplished?
- When is the deadline?
- Where will this be done?
- Who will be responsible for it?
- How will it get done?
- How much time, energy, and resources are required to accomplish this goal?

5.3 Recognizing the Advantages of Planning

The military saying, “If you fail to plan, you plan to fail,” is very true. Without a plan, managers are set up to encounter errors, waste, and delays. A plan, on the other hand, helps a manager organize resources and activities efficiently and effectively to achieve goals.

The advantages of planning are numerous. Planning fulfills the following objectives:

- **Gives an organization a sense of direction.** Without plans and goals, organizations merely react to daily occurrences without considering what will happen in the long run. For example, the solution that makes sense in the short term doesn't always make sense in the long term. Plans avoid this drift situation and ensure that short-range efforts will support and harmonize with future goals.
- **Focuses attention on objectives and results.** Plans keep the people who carry them out focused on the anticipated results. In addition, keeping sight of the goal also motivates employees.
- **Establishes a basis for teamwork.** Diverse groups cannot effectively cooperate in joint projects without an integrated plan. Examples are numerous: Plumbers, carpenters, and electricians cannot build a house without blueprints. In addition, military activities require the coordination of Army, Navy, and Air Force units.
- **Helps anticipate problems and cope with change.** When management plans, it can help forecast future problems and make any necessary changes up front to avoid them. Of course, surprises — such as the 1973 quadrupling of oil prices — can always catch an organization short, but many changes are easier to forecast. Planning for these potential problems helps to minimize mistakes and reduce the “surprises” that inevitably occur.
- **Provides guidelines for decision making.** Decisions are future-oriented. If management doesn't have any plans for the future, they will have few guidelines for making current decisions. If a company knows that it wants to introduce a new product three years in the future, its management must be mindful of the decisions they make now. Plans help both managers and employees keep their eyes on the big picture.
- **Serves as a prerequisite to employing all other management functions.** Planning is primary, because without knowing what an organization wants to accomplish, management can't intelligently undertake any of the other basic managerial activities: organizing, staffing, leading, and/or controlling.

5.4 USING PLANS TO ACHIEVE GOALS

Planning is a crucial activity, for it designs the map that lays the groundwork for the other functions. The plan itself specifies what should be done, by whom, where, when, and how. All businesses — from the smallest restaurant to the largest multinational corporation — need to develop plans for achieving success. But before an organization can plan a course of action, it must first determine what it wants to achieve. Objectives, the end results desired by the organization, are derived from the organization's **mission statement**. The mission statement explains what the organization stands for and why it exists. A strong mission statement symbolizes legitimacy to external audiences, such as investors, customers, and suppliers. Likewise, a strong mission statement allows employees to identify with the overall purpose of the organization and commit to preserving it.

The mission statement is the basis for all goals and plans outlined throughout the organization. Therefore, managers must use effective planning and goal-setting techniques to ensure that internal policies, roles, performances, structures, products, and expenditures are in line with the mission of the organization.

5.5 CRITERIA FOR EFFECTIVE GOALS

To make sure that goal setting benefits the organization, managers must adopt certain characteristics and guidelines. The following describes these criteria:

- **Goals must be specific and measurable.** When possible, use quantitative terms, such as increasing profits by two percent or decreasing student enrollment by one percent, to express goals.
- **Goals should cover key result areas.** Because goals cannot be set for every aspect of employee or organizational performance, managers should identify a few key result areas. These key areas are those activities that contribute most to company performance — for example, customer relations or sales.
- **Goals should be challenging but not too difficult.** When goals are unrealistic, they set employees up for failure and lead to low employee morale. However, if goals are too easy, employees may not feel motivated. Managers must be sure that goals are determined based on existing resources and are not beyond the team's time, equipment, and financial resources.
- **Goals should specify the time period over which they will be achieved.** Deadlines give team members something to work toward and help ensure continued progress. At the same time, managers should set short-term deadlines along the way so that their subordinates are not overwhelmed by one big, seemingly unaccomplishable goal. It would be more appropriate to provide a short term goal such as, “Establish a customer database by June 30.”
- **Goals should be linked to rewards.** People who attain goals should be rewarded with something meaningful and related to the goal. Not only will employees feel that their efforts are valued, but they will also have something tangible to motivate them in the future.

5.6 COORDINATION OF GOALS

All the different levels of management should have plans that work together to accomplish the organization's purpose. The plans of the top-, middle-, and first-level managers of an organization should work together to achieve the main goal.

All managers plan basically the same way, but the kinds of plans they develop and the amount of time they spend on planning vary. Here are some examples:

- Top-level managers are concerned with longer time periods and with plans for larger organizational units. Their planning includes developing the mission for the organizational units, the organizational objective, and major policy areas. These goals are called strategic goals or objectives.

- Middle-level managers' planning responsibilities center on translating broad objectives of top-level management into more specific goals for work units. These goals are called tactical goals or objectives.
- First-level managers are involved in day-to-day plans, such as scheduling work hours, deciding what work will be done and by whom, and developing structures to reach these goals. These goals are called operational goals or objectives.

If a first-level manager develops a set of plans that contradicts that of a middle-level manager, conflicts will result. Therefore, all managers must work together when planning their activities and the activities of others.

5.7 DETAILING TYPES OF PLANS

Plans commit individuals, departments, organizations, and the resources of each to specific actions for the future. Effectively designed organizational goals fit into a hierarchy so that the achievement of goals at low levels permits the attainment of high-level goals. This process is called a **means-ends chain** because low-level goals lead to accomplishment of high-level goals.

Three major types of plans can help managers achieve their organization's goals: strategic, tactical, and operational. Operational plans lead to the achievement of tactical plans, which in turn lead to the attainment of strategic plans. In addition to these three types of plans, managers should also develop a contingency plan in case their original plans fail.

5.7.1 Operational plans

The specific results expected from departments, work groups, and individuals are the **operational goals**. These goals are precise and measurable. “Process 150 sales applications each week” or “Publish 20 books this quarter” are examples of operational goals.

An **operational plan** is one that a manager uses to accomplish his or her job responsibilities. Supervisors, team leaders, and facilitators develop operational plans to support tactical plans (see the next section). Operational plans can be a single-use plan or an ongoing plan.

- **Single-use plans** apply to activities that do not recur or repeat. A one-time occurrence, such as a special sales program, is a single-use plan because it deals with the who, what, where, how, and how much of an activity. A budget is also a single-use plan because it predicts sources and amounts of income and how much they are used for a specific project.
- **Continuing or ongoing plans** are usually made once and retain their value over a period of years while undergoing periodic revisions and updates. The following are examples of ongoing plans:
 - A **policy** provides a broad guideline for managers to follow when dealing with important areas of decision making. Policies are general statements that explain how a manager should attempt to handle routine management responsibilities.

Typical human resources policies, for example, address such matters as employee hiring, terminations, performance appraisals, pay increases, and discipline.

- A **procedure** is a set of step-by-step directions that explains how activities or tasks are to be carried out. Most organizations have procedures for purchasing supplies and equipment, for example. This procedure usually begins with a supervisor completing a purchasing requisition. The requisition is then sent to the next level of management for approval. The approved requisition is forwarded to the purchasing department. Depending on the amount of the request, the purchasing department may place an order, or they may need to secure quotations and/or bids for several vendors before placing the order. By defining the steps to be taken and the order in which they are to be done, procedures provide a standardized way of responding to a repetitive problem.
- A **rule** is an explicit statement that tells an employee what he or she can and cannot do. Rules are “do” and “don't” statements put into place to promote the safety of employees and the uniform treatment and behavior of employees. For example, rules about tardiness and absenteeism permit supervisors to make discipline decisions rapidly and with a high degree of fairness.

5.7.2 Tactical plans

A **tactical plan** is concerned with what the lower level units within each division must do, how they must do it, and who is in charge at each level. Tactics are the means needed to activate a strategy and make it work.

Tactical plans are concerned with shorter time frames and narrower scopes than are strategic plans. These plans usually span one year or less because they are considered short-term goals. Long-term goals, on the other hand, can take several years or more to accomplish. Normally, it is the middle manager's responsibility to take the broad strategic plan and identify specific tactical actions.

5.7.3 Strategic plans

A **strategic plan** is an outline of steps designed with the goals of the entire organization as a whole in mind, rather than with the goals of specific divisions or departments. Strategic planning begins with an organization's mission.

Strategic plans look ahead over the next two, three, five, or even more years to move the organization from where it currently is to where it wants to be. Requiring multilevel involvement, these plans demand harmony among all levels of management within the organization. Top-level management develops the directional objectives for the entire organization, while lower levels of management develop compatible objectives and plans to achieve them. Top management's strategic plan for the entire organization becomes the framework and sets dimensions for the lower level planning.

5.7.4 Contingency plans

Intelligent and successful management depends upon a constant pursuit of adaptation, flexibility, and mastery of changing conditions. Strong management requires a “keeping all options open” approach at all times — that's where contingency planning comes in. **Contingency planning** involves identifying alternative courses of action that can be implemented if and when the original plan proves inadequate because of changing circumstances.

Keep in mind that events beyond a manager's control may cause even the most carefully prepared alternative future scenarios to go awry. Unexpected problems and events frequently occur. When they do, managers may need to change their plans. Anticipating change during the planning process is best in case things don't go as expected. Management can then develop alternatives to the existing plan and ready them for use when and if circumstances make these alternatives appropriate.

Lesson 6. Organising

6.1 INTRODUCTION

The second function of management is organizing. After a manager has a plan in place, she can structure her teams and resources. This important step can profoundly affect an organization's success. Not only does a business's organizational structure help determine how well its employees make decisions, but it also reflects how well they respond to problems. These responses, over time, can make or break an organization. In addition, the organizational structure influences employees' attitudes toward their work. A suitable organizational structure can minimize a business's costs, as well as maximize its efficiency, which increases its ability to compete in a global economy. For these reasons, many businesses have tinkered with their organizational structures in recent years in efforts to enhance their profits and competitive edge.

6.2 MEANING OF ORGANISING

Once managers have their plans in place, they need to organize the necessary resources to accomplish their goals. **Organizing**, the second of the universal management functions, is the process of establishing the orderly use of resources by assigning and coordinating tasks. The organizing process transforms plans into reality through the purposeful deployment of people and resources within a decision-making framework known as the organizational structure.

The organizational structure is defined as

- The set of formal tasks assigned to individuals and departments
- The formal reporting relationships, including lines of authority, decision responsibility, number of hierarchical levels, and span of managerial control
- The design of systems to ensure effective coordination of employees across departments

The organizational structure provides a framework for the hierarchy, or vertical structure, of the organization. An **organizational chart** is the visual representation of this vertical structure.

6.3 THE ORGANIZATIONAL PROCESS

Organizing, like planning, must be a carefully worked out and applied process. This process involves determining what work is needed to accomplish the goal, assigning those tasks to individuals, and arranging those individuals in a decision-making framework (organizational structure). The end result of the organizing process is an **organization** — a whole consisting of unified parts acting in harmony to execute tasks to achieve goals, both effectively and efficiently.

A properly implemented organizing process should result in a work environment where all

Agribusiness Management and Trade

A properly implemented organizing process should result in a work environment where all team members are aware of their responsibilities. If the organizing process is not conducted well, the results may yield confusion, frustration, loss of efficiency, and limited effectiveness.

In general, the organizational process consists of five steps (a flowchart of these steps is shown in Figure 6.1):

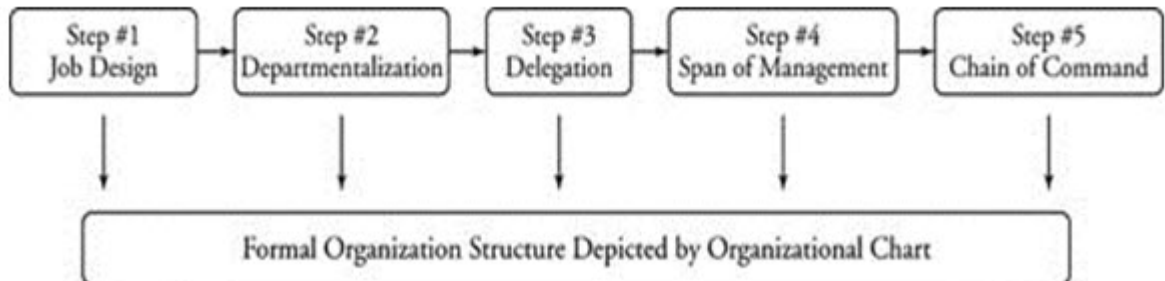


Figure 6.1: The organizational process

1. Review plans and objectives.

Objectives are the specific activities that must be completed to achieve goals. Plans shape the activities needed to reach those goals. Managers must examine plans initially and continue to do so as plans change and new goals are developed.

2. Determine the work activities necessary to accomplish objectives.

Although this task may seem overwhelming to some managers, it doesn't need to be. Managers simply list and analyze all the tasks that need to be accomplished in order to reach organizational goals.

3. Classify and group the necessary work activities into manageable units.

A manager can group activities based on four models of departmentalization: functional, geographical, product, and customer.

4. Assign activities and delegate authority.

Managers assign the defined work activities to specific individuals. Also, they give each individual the authority (right) to carry out the assigned tasks.

5. Design a hierarchy of relationships.

A manager should determine the vertical (decision-making) and horizontal (coordinating) relationships of the organization as a whole. Next, using the organizational chart, a manager should diagram the relationships.

6.4 CONCEPTS OF ORGANIZING

The working relationships — vertical and horizontal associations between individuals and groups — that exist within an organization affect how its activities are accomplished and coordinated. Effective organizing depends on the mastery of several important concepts: work specialization, chain of command, authority, delegation, span of control, and

work specialization, chain of command, authority, delegation, span of control, and centralization versus decentralization. Many of these concepts are based on the principles developed by Henri Fayol.

6.4.1 Work specialization

One popular organizational concept is based on the fundamental principle that employees can work more efficiently if they're allowed to specialize. **Work specialization**, sometimes called division of labor, is the degree to which organizational tasks are divided into separate jobs. Employees within each department perform only the tasks related to their specialized function.

When specialization is extensive, employees specialize in a single task, such as running a particular machine in a factory assembly line. Jobs tend to be small, but workers can perform them efficiently. By contrast, if a single factory employee built an entire automobile or performed a large number of unrelated jobs in a bottling plant, the results would be inefficient.

Despite the apparent advantages of specialization, many organizations are moving away from this principle. With too much specialization, employees are isolated and perform only small, narrow, boring tasks. In addition, if that person leaves the company, his specialized knowledge may disappear as well. Many companies are enlarging jobs to provide greater challenges and creating teams so that employees can rotate among several jobs.

6.4.2 Chain of command

The **chain of command** is an unbroken line of authority that links all persons in an organization and defines who reports to whom. This chain has two underlying principles: unity of command and scalar principle.

- **Unity of command:** This principle states that an employee should have one and only one supervisor to whom he or she is directly responsible. No employee should report to two or more people. Otherwise, the employee may receive conflicting demands or priorities from several supervisors at once, placing this employee in a no-win situation.

Sometimes, however, an organization deliberately breaks the chain of command, such as when a project team is created to work on a special project. In such cases, team members report to their immediate supervisor and also to a team project leader. Another example is when a sales representative reports to both an immediate district supervisor and a marketing specialist, who is coordinating the introduction of a new product, in the home office.

Nevertheless, these examples are exceptions to the rule. They happen under special circumstances and usually only within a special type of employee group. For the most part, however, when allocating tasks to individuals or grouping assignments, management should ensure that each has one boss, and only one boss, to whom he or she directly reports.

- **Scalar principle:** The scalar principle refers to a clearly defined line of authority.

- **Scalar principle.** The scalar principle refers to a clearly defined line of authority that includes all employees in the organization. The classical school of management suggests that there should be a clear and unbroken chain of command linking every person in the organization with successively higher levels of authority up to and including the top manager. When organizations grow in size, they tend to get taller, as more and more levels of management are added. This increases overhead costs, adds more communication layers, and impacts understanding and access between top and bottom levels. It can greatly slow decision making and can lead to a loss of contact with the client or customer.

6.4.3 Authority

Authority is the formal and legitimate right of a manager to make decisions, issue orders, and allocate resources to achieve organizationally desired outcomes. A manager's authority is defined in his or her job description.

Organizational authority has three important underlying principles:

- Authority is based on the organizational position, and anyone in the same position has the same authority.
- Authority is accepted by subordinates. Subordinates comply because they believe that managers have a legitimate right to issue orders.
- Authority flows down the vertical hierarchy. Positions at the top of the hierarchy are vested with more formal authority than are positions at the bottom.

In addition, authority comes in three types:

- **Line authority** gives a manager the right to direct the work of his or her employees and make many decisions without consulting others. Line managers are always in charge of essential activities such as sales, and they are authorized to issue orders to subordinates down the chain of command.
- **Staff authority** supports line authority by advising, servicing, and assisting, but this type of authority is typically limited. For example, the assistant to the department head has staff authority because he or she acts as an extension of that authority. These assistants can give advice and suggestions, but they don't have to be obeyed. The department head may also give the assistant the authority to act, such as the right to sign off on expense reports or memos. In such cases, the directives are given under the line authority of the boss.
- **Functional authority** is authority delegated to an individual or department over specific activities undertaken by personnel in other departments. Staff managers may have functional authority, meaning that they can issue orders down the chain of command within the very narrow limits of their authority. For example, supervisors in a manufacturing plant may find that their immediate bosses have line authority over them, but that someone in corporate headquarters may also have line authority over some of their activities or decisions.

Why would an organization create positions of functional authority? After all, this

Why would an organization create positions of functional authority? After all, this authority breaks the unity of command principle by having individuals report to two bosses. The answer is that functional authority allows specialization of skills and improved coordination. This concept was originally suggested by Frederick Taylor. He separated “planning” from “doing” by establishing a special department to relieve the laborer and the foreman from the work of planning. The role of the foreman became one of making sure that planned operations were carried out. The major problem of functional authority is overlapping relationships, which can be resolved by clearly designating to individuals which activities their immediate bosses have authority over and which activities are under the direction of someone else.

6.4.4 Delegation

A concept related to authority is **delegation**. Delegation is the downward transfer of authority from a manager to a subordinate. Most organizations today encourage managers to delegate authority in order to provide maximum flexibility in meeting customer needs. In addition, delegation leads to empowerment, in that people have the freedom to contribute ideas and do their jobs in the best possible ways. This involvement can increase job satisfaction for the individual and frequently results in better job performance. Without delegation, managers do all the work themselves and underutilize their workers. The ability to delegate is crucial to managerial success. Managers need to take four steps if they want to successfully delegate responsibilities to their teams.

1. Specifically assign tasks to individual team members.

The manager needs to make sure that employees know that they are ultimately responsible for carrying out specific assignments.

2. Give team members the correct amount of authority to accomplish assignments.

Typically, an employee is assigned authority commensurate with the task. A classical principle of organization warns managers not to delegate without giving the subordinate the authority to perform the delegated task. When an employee has responsibility for the task outcome but little authority, accomplishing the job is possible but difficult. The subordinate without authority must rely on persuasion and luck to meet performance expectations. When an employee has authority exceeding responsibility, he or she may become a tyrant, using authority toward frivolous outcomes.

3. Make sure that team members accept responsibility.

Responsibility is the flip side of the authority coin. Responsibility is the duty to perform the task or activity an employee has been assigned. An important distinction between authority and responsibility is that the supervisor delegates authority, but the responsibility is shared. Delegation of authority gives a subordinate the right to make commitments, use resources, and take actions in relation to duties assigned. However, in making this delegation, the obligation created is not shifted from the supervisor to the subordinate — it is shared. A supervisor always retains some responsibility for work performed by lower-level units or individuals.

4. Create accountability

7. Create accountability.

Team members need to know that they are accountable for their projects. **Accountability** means answering for one's actions and accepting the consequences. Team members may need to report and justify task outcomes to their superiors. Managers can build accountability into their organizational structures by monitoring performances and rewarding successful outcomes. Although managers are encouraged to delegate authority, they often find accomplishing this step difficult for the following reasons:

- Delegation requires planning, and planning takes time. A manager may say, "By the time I explain this task to someone, I could do it myself." This manager is overlooking the fact that the initial time spent up front training someone to do a task may save much more time in the long run. Once an employee has learned how to do a task, the manager will not have to take the time to show that employee how to do it again. This improves the flow of the process from that point forward.
- Managers may simply lack confidence in the abilities of their subordinates. Such a situation fosters the attitude, "If you want it done well, do it yourself." If managers feel that their subordinates lack abilities, they need to provide appropriate training so that all are comfortable performing their duties.
- Managers experience dual accountability. Managers are accountable for their own actions and the actions of their subordinates. If a subordinate fails to perform a certain task or does so poorly, the manager is ultimately responsible for the subordinate's failure. But by the same token, if a subordinate succeeds, the manager shares in that success as well, and the department can be even more productive.
- Finally, managers may refrain from delegating because they are insecure about their value to the organization. However, managers need to realize that they become more valuable as their teams become more productive and talented.

Despite the perceived disadvantages of delegation, the reality is that a manager can improve the performance of his or her work groups by empowering subordinates through effective delegation. Few managers are successful in the long term without learning to delegate effectively.

6.4.5 Span of control

Span of control (sometimes called span of management) refers to the number of workers who report to one manager. For hundreds of years, theorists have searched for an ideal span of control. When no perfect number of subordinates for a manager to supervise became apparent, they turned their attention to the more general issue of whether the span should be wide or narrow.

A wide span of management exists when a manager has a large number of subordinates.

A wide span of management exists when a manager has a large number of subordinates.

Generally, the span of control may be wide when

- The manager and the subordinates are very competent.
- The organization has a well-established set of standard operating procedures.
- Few new problems are anticipated.

A narrow span of management exists when the manager has only a few subordinates. The span should be narrow when

- Workers are located far from one another physically.
- The manager has a lot of work to do in addition to supervising workers.
- A great deal of interaction is required between supervisor and workers.
- New problems arise frequently.

Keep in mind that the span of management may change from one department to another within the same organization.

6.5 CENTRALIZATION VERSUS DECENTRALIZATION

The general pattern of authority throughout an organization determines the extent to which that organization is centralized or decentralized.

A **centralized organization** systematically works to concentrate authority at the upper levels. In a **decentralized organization**, management consciously attempts to spread authority to the lower organization levels.

A variety of factors can influence the extent to which a firm is centralized or decentralized. The following is a list of possible determinants:

- **The external environment in which the firm operates.** The more complex and unpredictable this environment, the more likely it is that top management will let low-level managers make important decisions. After all, low-level managers are closer to the problems because they are more likely to have direct contact with customers and workers. Therefore, they are in a better position to determine problems and concerns.
- **The nature of the decision itself.** The riskier or the more important the decision, the greater the tendency to centralize decision making.
- **The abilities of low-level managers.** If these managers do not have strong decision-making skills, top managers will be reluctant to decentralize. Strong low-level decision-making skills encourage decentralization.
- **The organization's tradition of management.** An organization that has traditionally practiced centralization or decentralization is likely to maintain that posture in the future.

In principle, neither philosophy is right or wrong. What works for one organization may or

In principle, neither philosophy is right or wrong. What works for one organization may or may not work for another. Kmart Corporation and McDonald's have both been very successful — both practice centralization. By the same token, decentralization has worked very well for General Electric and Sears. Every organization must assess its own situation and then choose the level of centralization or decentralization that works best.

6.6 ORGANIZATIONAL DESIGN DEFINED

Few things endure long term without being changed. Even well-known brand names, familiar slogans, and classic songs face updates in today's changing culture. Organizations are no different, and must respond to changes in their environments as well. Whether its technology upgrades to meet customer demands or policy updates to accommodate employee growth, managers must be both willing and able to deal with the challenges of change.

An organization's structure is defined by its configuration and interrelationships of positions and departments. **Organizational design** is the creation or change of an organization's structure. The organizational design of a company reflects its efforts to respond to changes, integrate new elements, ensure collaboration, and allow flexibility.

Organizing a business is difficult. Once an organization has a plan, the next step is to make it happen. The major characteristics of organizational structure are, in many ways, like the important parts of a jigsaw puzzle—you pick them out, one by one

Lesson 7. Staffing

7.1 INTRODUCTION

After an organization's structural design is in place, it needs people with the right skills, knowledge, and abilities to fill in that structure. People are an organization's most important resource, because people either create or undermine an organization's reputation for quality in both products and service. In addition, an organization must respond to change effectively in order to remain competitive. The right staff can carry an organization through a period of change and ensure its future success. Because of the importance of hiring and maintaining a committed and competent staff, effective human resource management is crucial to the success of all organizations.

7.2 MEANING OF STAFFING

Human resource management (HRM), or staffing, is the management function devoted to acquiring, training, appraising, and compensating employees. In effect, all managers are human resource managers, although human resource specialists may perform some of these activities in large organizations. Solid HRM practices can mold a company's workforce into a motivated and committed team capable of managing change effectively and achieving the organizational objectives.

Understanding the fundamentals of HRM can help any manager lead more effectively. Every manager should understand the following three principles:

- All managers are human resource managers.
- Employees are much more important assets than buildings or equipment; good employees give a company the competitive edge.
- Human resource management is a matching process; it must match the needs of the organization with the needs of the employee.

Determining Human Resource Needs

Staffing is an ongoing process that begins with finding the right people through proper planning, recruiting, and selecting. But staffing doesn't end once employees are hired; management must keep and nurture its people via training, appraising, compensating, and implementing employment decisions that determine such things as promotions, transfers, and layoffs.

7.3 HUMAN RESOURCE PLANNING

The first step in the staffing process involves human resource planning. Human resource planning begins with a **job analysis** in which descriptions of all jobs (tasks) and the qualifications needed for each position are developed. A **job description** is a written

statement of what a jobholder does, how it's done, and why it's done. It typically portrays job content, environment, and conditions of employment. The job specification states the minimum acceptable qualifications an incumbent must possess to perform a given job successfully. It identifies the knowledge, skills, and abilities needed to do the job effectively.

Job analysis is then followed by a human resource inventory, which catalogs qualifications and interests. Next, a human resource forecast is developed to predict the organization's future needs for jobs and people based on its strategic plans and normal attrition. The forecast is then compared to the inventory to determine whether the organization's staffing needs will be met with existing personnel or whether managers will have to recruit new employees or terminate existing ones.

7.4 RECRUITING STRATEGIES

Recruitment includes all the activities an organization may use to attract a pool of viable candidates. Keep in mind that recruiting strategies differ among organizations. Although one may instantly think of campus recruiting as a typical recruiting activity, many organizations use internal recruiting, or promote-from-within policies, to fill their high-level positions. Open positions are posted, and current employees are given preferences when these positions become available. Internal recruitment is less costly than an external search. It also generates higher employee commitment, development, and satisfaction because it offers opportunities for career advancement to employees rather than outsiders.

If internal sources do not produce an acceptable candidate, many external recruiting strategies are available, including the following:

- Newspaper advertising
- Employment agencies (private, public, or temporary agencies)
- Executive recruiters (sometimes called headhunters)
- Unions
- Employee referrals
- Internship programs
- Internet employment sites

But there's more to recruiting than just attracting employees; managers need to be able to weed out the top candidates. Once a manager has a pool of applicants, the selection process can begin.

7.4.1 SELECTING THE BEST PERSON FOR THE JOB

Having the right people on staff is crucial to the success of an organization. Various selection devices help employers predict which applicants will be successful if hired. These devices aim to be not only valid, but also reliable. Validity is proof that the relationship between the selection device and some relevant job criterion exists. Reliability is an indicator that the device measures the same thing consistently. For

example, it would be appropriate to give a keyboarding test to a candidate applying for a job as an administrative assistant. However, it would not be valid to give a keyboarding test to a candidate for a job as a physical education teacher. If a keyboarding test is given to the same individual on two separate occasions, the results should be similar. To be effective predictors, a selection device must possess an acceptable level of consistency.

7.5 SELECTION TECHNIQUES

Application forms

For most employers, the application form is the first step in the selection process. Application forms provide a record of salient information about applicants for positions, and also furnish data for personnel research. Interviewers may use responses from the application for follow-up questions during an interview.

These forms range from requests for basic information, such as names, addresses, and telephone numbers, to comprehensive personal history profiles detailing applicants' education, job experience skills, and accomplishments.

Testing

Testing is another method of selecting competent future employees. Although testing use has ebbed and flowed during the past two decades, recent studies reveal that more than 80 percent of employers use testing as part of their selection process.

Again, these tests must be valid and reliable. As a result, a manager needs to make sure that the test measures only job-relevant dimensions of applicants.

Most tests focus on specific job-related aptitudes and skills, such as math or motor skills.

Interviews

Another widely used selection technique is the interview, a formal, in-depth conversation conducted to evaluate an applicant's acceptability. In general, the interviewer seeks to answer three broad questions:

1. Can the applicant do the job?
2. Will the applicant do the job?
3. How does the applicant compare with others who are being considered for the job?

Interviews are popular because of their flexibility. They can be adapted to unskilled, skilled, managerial, and staff employees. They also allow a two-way exchange of information where interviewers can learn about the applicant and the applicant can learn about the employer.

Interviews do have some shortcomings, however. The most noticeable flaws are in the areas of reliability and validity. Good reliability means that the interpretation of the

interview results does not vary from interviewer to interviewer. Reliability is improved when identical questions are asked. The validity of interviews is often questionable because few departments use standardized questions.

Managers can boost the reliability and validity of selection interviews by planning the interviews, establishing rapport, closing the interview with time for questions, and reviewing the interview as soon as possible after its conclusion.

Other selection techniques

Reference checking and health exams are two other important selection techniques that help in the staffing decision.

- **Reference checking** allows employers to verify information supplied by the candidate. However, obtaining information about potential candidates is often difficult because of privacy laws and employer concerns about defamation lawsuits.
- **Health exams** identify health problems that increase absenteeism and accidents, as well as detecting diseases that may be unknown to the applicant.

7.6 ORIENTATION AND TRAINING PROGRAMS

Once employees are selected, they must be prepared to do their jobs, which is when orientation and training come in. **Orientation** means providing new employees with basic information about the employer. Training programs are used to ensure that the new employee has the basic knowledge required to perform the job satisfactorily.

Orientation and training programs are important components in the processes of developing a committed and flexible high-potential workforce and socializing new employees. In addition, these programs can save employers money, providing big returns to an organization, because an organization that invests money to train its employees results in both the employees and the organization enjoying the dividends.

7.6.1 Orientation

Orientation programs not only improve the rate at which employees are able to perform their jobs but also help employees satisfy their personal desires to feel they are part of the organization's social fabric. The HR department generally orients newcomers to broad organizational issues and fringe benefits. Supervisors complete the orientation process by introducing new employees to coworkers and others involved in the job. A buddy or mentor may be assigned to continue the process.

7.6.2 Training needs

Simply hiring and placing employees in jobs does not ensure their success. In fact, even tenured employees may need training, because of changes in the business environment. Here are some changes that may signal that current employees need training:

- Introduction of new equipment or processes

- A change in the employee's job responsibilities
- A drop in an employee's productivity or in the quality of output
- An increase in safety violations or accidents
- An increased number of questions
- Complaints by customers or coworkers

Once managers decide that their employees need training, these managers need to develop clear training goals that outline anticipated results. These managers must also be able to clearly communicate these goals to employees.

7.6.3 Training methods

Most training takes place on the job due to the simplicity and lower cost of **on-the-job** training methods. Two popular types of on-the-job training include the following:

- **Job rotation.** By assigning people to different jobs or tasks to different people on a temporary basis, employers can add variety and expose people to the dependence that one job has on others. Job rotation can help stimulate people to higher levels of contributions, renew people's interest and enthusiasm, and encourage them to work more as a team.
- **Mentoring programs.** A new employee frequently learns his or her job under the guidance of a seasoned veteran. In the trades, this type of training is usually called an apprenticeship. In white-collar jobs, it is called a coaching or mentoring relationship. In each, the new employee works under the observation of an experienced worker.

7.7 EVALUATING EMPLOYEE PERFORMANCE

Employee performance should be evaluated regularly. Employees want feedback—they want to know what their supervisors think about their work. Regular performance evaluations not only provide feedback to employees, but also provide employees with an opportunity to correct deficiencies. Evaluations or reviews also help in making key personnel decisions, such as the following:

- Justifying promotions, transfers, and terminations
- Identifying training needs
- Providing feedback to employees on their performance
- Determining necessary pay adjustments

Most organizations utilize employee evaluation systems; one such system is known as a **performance appraisal**. A performance appraisal is a formal, structured system designed to measure the actual job performance of an employee against designated performance standards. Although performance appraisals systems vary by organizations, all employee evaluations should have the following three components:

- Specific, job-related criteria against which performance can be compared
- A rating scale that lets employees know how well they're meeting the criteria
- Objective methods, forms, and procedures to determine the rating

Traditionally, an employee's immediate boss conducts his or her performance appraisal. However, some organizations use other devices, such as peer evaluations, self-appraisals, and even customer evaluations, for conducting this important task.

The latest approach to performance evaluation is the use of 360-degree feedback. The 360-degree feedback appraisal provides performance feedback from the full circle of daily contacts that an employee may have. This method of performance appraisal fits well into organizations that have introduced teams, employee involvement, and TQM programs.

7.8 MAKING EMPLOYMENT DECISIONS

Employment decisions go beyond determining which employees are due for raises. Through regular, objective performance appraisals, managers acquire information to make and implement decisions about promotions, transfers, demotions, separations, and compensation.

In most organizations, outstanding employees are recognized for their hard work and outstanding performances, and offered promotions. A promotion generally means rewarding an employee's efforts by moving that person to a job with increased authority and responsibility.

Downsizing has led many firms to rely on lateral moves or transfers instead of promoting employees. A lateral move can act as an opportunity for future vertical advancement because it can broaden an employee's experiences and add skills.

On the other hand, sometimes employees' performances signal that they aren't adapting well to their jobs and may need fewer responsibilities. One option is a demotion, or reassignment to a lower rank or less prestigious position. Demotions are not a popular technique because of the stigma attached to this move. A misconception is that demotions should be used as punishment for ineffective performance.

The departure of an employee from an organization is referred to as separation. Separation may be voluntary or involuntary. Resignations and retirements are voluntary separations. Involuntary separations are layoffs and/or firings. Lately, the rash of downsizing throughout the United States has resulted in many layoffs.

Sometimes, however, an employee must be terminated because of poor performance. Dismissal or firing of employees should occur only on the basis of just cause and only after all reasonable steps to rehabilitate the employee have failed. In some cases, such as gross insubordination or theft, immediate dismissal is required.

7.9 COMPENSATING EMPLOYEES

Employee **compensation** refers to all work-related payments, including wages, commissions, insurance, and time off.

Wages and salaries are the most obvious forms of compensation and are based on job evaluations that determine the relative values of jobs to the organization. Under the hourly wage system, employees are paid a fixed amount for each hour they work. The system is generally used for lower skilled occupations. Salaried employees receive a fixed sum per week or month, no matter how many hours they work. Most professional positions are salaried; the reality is that these jobholders typically work in excess of a “minimum” 40-hour workweek.

Some occupations are compensated through incentive pay programs. Salespeople typically receive commissions based upon the quantities of goods they sell. Some sales compensation plans contain elements of both a salary and commission. A production worker's pay may be based upon some combination of an hourly wage and an incentive for each “piece” he or she makes. Some employees are offered merit awards as a reward for sustained superior performance.

Employee benefits are supplements to wages or pay. Some benefits, such as unemployment and worker's compensation, are legally mandated. Other benefits are optional and help build employee loyalty to an organization, including the following:

- Health insurance
- Pension plans
- Employee discounts
- Vacation, sick, and personal days
- Bonuses (incentive money paid to employees in addition to their regular compensation)
- Profit-sharing (money from a portion of the company profits used to supplement regular compensation)
- Stock options (a plan that permits employees to buy shares of stock in the employee's firm at or below the present market value)

A top management executive is given benefits unique to his or her status. Additional executive benefits are termed perquisites (perks).

Lesson 8. Leading and Leadership

8.1 INTRODUCTION

Leading is establishing direction and influencing others to follow that direction. But this definition isn't as simple as it sounds because leadership has many variations and different areas of emphasis. Common to all definitions of leadership is the notion that leaders are individuals who, by their actions, facilitate the movement of a group of people toward a common or shared goal. This definition implies that leadership is an influence process.

8.2 LEADERSHIP AND MANAGEMENT

The distinction between leader and leadership is important, but potentially confusing. The leader is an individual; leadership is the function or activity this individual performs. The word leader is often used interchangeably with the word manager to describe those individuals in an organization who have positions of formal authority, regardless of how they actually act in those jobs. But just because a manager is supposed to be a formal leader in an organization doesn't mean that he or she exercises leadership.

An issue often debated among business professionals is whether leadership is a different function and activity from management. Harvard's John Kotter says that management is about coping with complexity, and leadership, in contrast, is about coping with change. He also states that leadership is an important part of management, but only a part; management also requires planning, organizing, staffing, and controlling. Management produces a degree of predictability and order. Leadership produces change. Kotter believes that most organizations are under led and over managed. He sees both strong leadership and strong management as necessary for optimal organizational effectiveness.

8.3 LEADERSHIP TRAITS

Theories abound to explain what makes an effective leader. The oldest theories attempt to identify the common traits or skills that make an effective leader. Contemporary theorists and theories concentrate on actions of leaders rather than characteristics.

A number of traits that appear regularly in leaders include ambition, energy, the desire to lead, self-confidence, and intelligence. Although certain traits are helpful, these attributes provide no guarantees that a person possessing them is an effective leader. Underlying the trait approach is the assumption that some people are natural leaders and are endowed with certain traits not possessed by other individuals. This research compared successful and unsuccessful leaders to see how they differed in physical characteristics, personality, and ability.

A recent published analysis of leadership traits ("Leadership: Do Traits Really Matter?" , "Leadership: Do Traits Really Matter?" Academy of Management Executive 5 [1991]) identified six core characteristics that the majority of effective leaders possess:

- 1. **Drive** Leaders are ambitious and take initiative

- **DRIVE.** Leaders are ambitious and take initiative.

- **Motivation.** Leaders want to lead and are willing to take charge.
- **Honesty and integrity.** Leaders are truthful and do what they say they will do.
- **Self-confidence.** Leaders are assertive and decisive and enjoy taking risks. They admit mistakes and foster trust and commitment to a vision. Leaders are emotionally stable rather than recklessly adventurous.
- **Cognitive ability.** Leaders are intelligent, perceptive, and conceptually skilled, but are not necessarily geniuses. They show analytical ability, good judgment, and the capacity to think strategically.
- **Business knowledge.** Leaders tend to have technical expertise in their businesses.

Traits do a better job at predicting that a manager may be an effective leader rather than actually distinguishing between an effective or ineffective leader. Because workplace situations vary, leadership requirements vary. As a result, researchers began to examine what effective leaders do rather than what effective leaders are.

8.4 LEADERSHIP SKILLS

Whereas traits are the characteristics of leaders, skills are the knowledge and abilities, or competencies, of leaders. The competency a leader needs depends upon the situation.

These competencies depend on a variety of factors:

- The number of people following the leader
- The extent of the leader's leadership skills
- The leader's basic nature and values
- The group or organization's background, such as whether it's for profit or not-for-profit, new or long established, large or small
- The particular culture (or values and associated behaviors) of whomever is being led

To help managers refine these skills, leadership-training programs typically propose guidelines for making decisions, solving problems, exercising power and influence, and building trust.

Peter Drucker, one of the best-known contemporary management theorists, offers a pragmatic approach to leadership in the workplace. He believes that consistency is the key to good leadership, and that successful leaders share the following three abilities which are based on what he refers to as good old-fashioned hard work:

- **To define and establish a sense of mission.** Good leaders set goals, priorities, and standards, making sure that these objectives not only are communicated but maintained.

- **To accept leadership as a responsibility rather than a rank.** Good leaders aren't

- **To accept leadership as a responsibility rather than a rank.** Good leaders aren't afraid to surround themselves with talented, capable people; they do not blame others when things go wrong.
- **To earn and keep the trust of others.** Good leaders have personal integrity and inspire trust among their followers; their actions are consistent with what they say.

In Drucker's words, "Effective leadership is not based on being clever; it is based primarily on being consistent."

Very simply put, leading is establishing direction and influencing others to follow that direction. Keep in mind that no list of leadership traits and skills is definitive because no two successful leaders are alike. What is important is that leaders exhibit some positive characteristics that make them effective managers at any level in an organization.

8.5 LEADERSHIP STYLES

No matter what their traits or skills, leaders carry out their roles in a wide variety of styles. Some leaders are autocratic. Others are democratic. Some are participatory, and others are hands off. Often, the leadership style depends on the situation, including where the organization is in its life cycle.

The following are common leadership styles:

- **Autocratic.** The manager makes all the decisions and dominates team members. This approach generally results in passive resistance from team members and requires continual pressure and direction from the leader in order to get things done. Generally, this approach is not a good way to get the best performance from a team. However, this style may be appropriate when urgent action is necessary or when subordinates actually prefer this style.
- **Participative.** The manager involves the subordinates in decision making by consulting team members (while still maintaining control), which encourages employee ownership for the decisions.

A good participative leader encourages participation and delegates wisely, but never loses sight of the fact that he or she bears the crucial responsibility of leadership. The leader values group discussions and input from team members; he or she maximizes the members' strong points in order to obtain the best performance from the entire team. The participative leader motivates team members by empowering them to direct themselves; he or she guides them with a loose rein. The downside, however, is that a participative leader may be seen as unsure, and team members may feel that everything is a matter for group discussion and decision.

- **Laissez-faire** (also called free-rein). In this hands-off approach, the leader encourages team members to function independently and work out their problems by themselves, although he or she is available for advice and assistance. The leader usually has little control over team members, leaving them to sort out their roles and tackle their work assignments without personally participating in these processes. In general, this approach leaves the team floundering with little direction or motivation. Laissez faire is usually only appropriate when the team is highly

Motivation. Laissez-faire is usually only appropriate when the team is highly motivated and skilled, and has a history of producing excellent work.

Many experts believe that overall leadership style depends largely on a manager's beliefs, values, and assumptions. How managers approach the following three elements—motivation, decision making, and task orientation—affect their leadership styles:

- **Motivation.** Leaders influence others to reach goals through their approaches to motivation. They can use either positive or negative motivation. A positive style uses praise, recognition, and rewards, and increases employee security and responsibility. A negative style uses punishment, penalties, potential job loss, suspension, threats, and reprimands.
- **Decision making.** The second element of a manager's leadership style is the degree of decision authority the manager grants employees—ranging from no involvement to group decision making.
- **Task and employee orientation.** The final element of leadership style is the manager's perspective on the most effective way to get the work done. Managers who favor task orientation emphasize getting work done by using better methods or equipment, controlling the work environment, assigning and organizing work, and monitoring performance. Managers who favor employee orientation emphasize getting work done through meeting the human needs of subordinates. Teamwork, positive relationships, trust, and problem solving are the major focuses of the employee-oriented manager.

Keep in mind that managers may exhibit both task and employee orientations to some degree.

The managerial grid model, shown in Figure 8.1 and developed by Robert Blake and Jane Mouton, identifies five leadership styles with varying concerns for people and production:

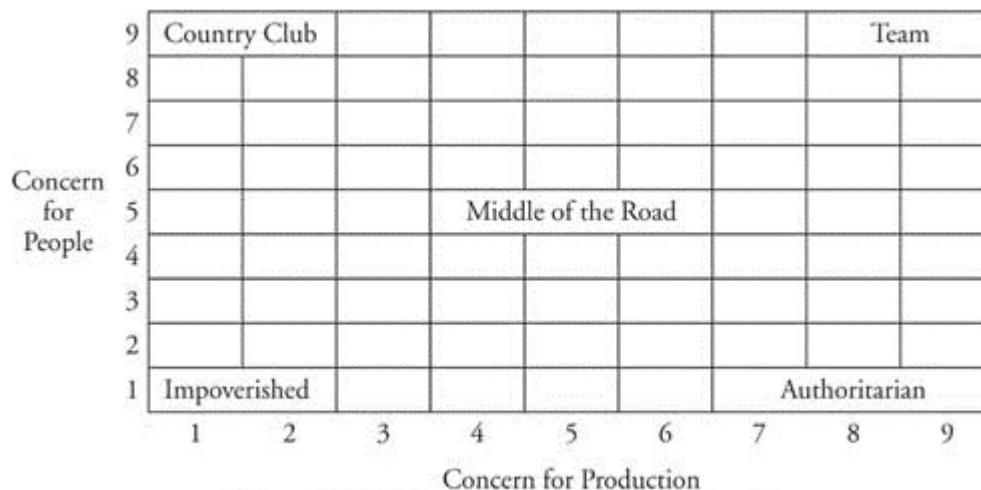


Figure 8.1 Blake-Mouton Managerial grid

- The **impoverished style**, located at the lower left-hand corner of the grid, point (1, 1), is characterized by low concern for both people and production; its primary objective is for managers to stay out of trouble.
- The **country club style**, located at the upper left-hand corner of the grid, point (1, 9), is characterized by high concern for people and low concern for production; its primary objective is to create a comfortable, pleasant work environment.

Agribusiness Management and Trade

- The **country club style**, located at the upper left-hand corner of the grid, point (1, 9), is distinguished by high concern for people and a low concern for production; its primary objective is to create a secure and comfortable atmosphere where managers trust that subordinates will respond positively.
- The **authoritarian style**, located at the lower right-hand corner of the grid, point (9,1), is identified by high concern for production and low concern for people; its primary objective is to achieve the organization's goals, and employee needs are not relevant in this process.
- The **middle-of-the-road style**, located at the middle of the grid, point (5, 5), maintains a balance between workers' needs and the organization's productivity goals; its primary objective is to maintain employee morale at a level sufficient to get the organization's work done.
- The **team style**, located at the upper right-hand of the grid, point (9, 9), is characterized by high concern for people and production; its primary objective is to establish cohesion and foster a feeling of commitment among workers.

Lesson 9. Controlling

9.1 INTRODUCTION

Simply put, organizational control is the process of assigning, evaluating, and regulating resources on an ongoing basis to accomplish an organization's goals. To successfully control an organization, managers need to not only know what the performance standards are, but also figure out how to share that information with employees.

9.2 MEANING OF CONTROL

Control can be defined narrowly as the process a manager takes to assure that actual performance conforms to the organization's plan, or more broadly as anything that regulates the process or activity of an organization. The following content follows the general interpretation by defining managerial control as monitoring performance against a plan and then making adjustments either in the plan or in operations as necessary.

The six major purposes of controls are as follows:

- **Controls make plans effective.** Managers need to measure progress, offer feedback, and direct their teams if they want to succeed.
- **Controls make sure that organizational activities are consistent.** Policies and procedures help ensure that efforts are integrated.
- **Controls make organizations effective.** Organizations need controls in place if they want to achieve and accomplish their objectives.
- **Controls make organizations efficient.** Efficiency probably depends more on controls than any other management function.
- **Controls provide feedback on project status.** Not only do they measure progress, but controls also provide feedback to participants as well. Feedback influences behavior and is an essential ingredient in the control process.
- **Controls aid in decision making.** The ultimate purpose of controls is to help managers make better decisions. Controls make managers aware of problems and give them information that is necessary for decision making.

Many people assert that as the nature of organizations has changed, so must the nature of management controls. New forms of organizations, such as self-organizing organizations, self-managed teams, and network organizations, allow organizations to be more responsive and adaptable in today's rapidly changing world. These forms also cultivate empowerment among employees, much more so than the hierarchical organizations of the past.

Some people even claim that management shouldn't exercise any form of control whatsoever, and should only support employee efforts to be fully productive members of

organizations and communities. Along those same lines, some experts even use the word “coordinating” in place of “controlling” to avoid sounding coercive. However, some forms of controls must exist for an organization to exist. For an organization to exist, it needs some goal or purpose, or it isn't an organization at all. Individual behaviors, group behaviors, and all organizational performance must be in line with the strategic focus of the organization.

9.3 THE ORGANIZATIONAL CONTROL PROCESS

The control process involves carefully collecting information about a system, process, person, or group of people in order to make necessary decisions about each. Managers set up control systems that consist of four key steps:

1. **Establish standards to measure performance.** Within an organization's overall strategic plan, managers define goals for organizational departments in specific, operational terms that include standards of performance to compare with organizational activities.
2. **Measure actual performance.** Most organizations prepare formal reports of performance measurements that managers review regularly. These measurements should be related to the standards set in the first step of the control process. For example, if sales growth is a target, the organization should have a means of gathering and reporting sales data.
3. **Compare performance with the standards.** This step compares actual activities to performance standards. When managers read computer reports or walk through their plants, they identify whether actual performance meets, exceeds, or falls short of standards. Typically, performance reports simplify such comparison by placing the performance standards for the reporting period alongside the actual performance for the same period and by computing the variance—that is, the difference between each actual amount and the associated standard.
4. **Take corrective actions.** When performance deviates from standards, managers must determine what changes, if any, are necessary and how to apply them. In the productivity and quality-centered environment, workers and managers are often empowered to evaluate their own work. After the evaluator determines the cause or causes of deviation, he or she can take the fourth step—corrective action. The most effective course may be prescribed by policies or may be best left up to employees' judgment and initiative.

These steps must be repeated periodically until the organizational goal is achieved.

9.4 CHARACTERISTICS OF EFFECTIVE ORGANIZATIONAL CONTROL SYSTEMS

The management of any organization must develop a control system tailored to its organization's goals and resources. Effective control systems share several common characteristics. These characteristics are as follows:

- **A focus on critical points.** For example, controls are applied where failure cannot be tolerated or where costs cannot exceed a certain amount. The critical points

include all the areas of an organization's operations that directly affect the success of its key operations.

- **Integration into established processes.** Controls must function harmoniously within these processes and should not bottleneck operations.
- **Acceptance by employees.** Employee involvement in the design of controls can increase acceptance.
- **Availability of information when needed.** Deadlines, time needed to complete the project, costs associated with the project, and priority needs are apparent in these criteria. Costs are frequently attributed to time shortcomings or failures.
- **Economic feasibility.** Effective control systems answer questions such as, “How much does it cost?” “What will it save?” or “What are the returns on the investment?” In short, comparison of the costs to the benefits ensures that the benefits of controls outweigh the costs.
- **Accuracy.** Effective control systems provide factual information that's useful, reliable, valid, and consistent.
- **Comprehensibility.** Controls must be simple and easy to understand.

9.5 ORGANIZATIONAL CONTROL TECHNIQUES

Control techniques provide managers with the type and amount of information they need to measure and monitor performance. The information from various controls must be tailored to a specific management level, department, unit, or operation.

To ensure complete and consistent information, organizations often use standardized documents such as financial, status, and project reports. Each area within an organization, however, uses its own specific control techniques, described in the following sections.

9.5.1 Financial controls

After the organization has strategies in place to reach its goals, funds are set aside for the necessary resources and labor. As money is spent, statements are updated to reflect how much was spent, how it was spent, and what it obtained. Managers use these financial statements, such as an income statement or balance sheet, to monitor the progress of programs and plans. **Financial statements** provide management with information to monitor financial resources and activities. The **income statement** shows the results of the organization's operations over a period of time, such as revenues, expenses, and profit or loss. The balance sheet shows what the organization is worth (assets) at a single point in time, and the extent to which those assets were financed through debt (liabilities) or owner's investment (equity).

Financial audits, or formal investigations, are regularly conducted to ensure that financial management practices follow generally accepted procedures, policies, laws, and ethical guidelines. Audits may be conducted internally or externally. **Financial ratio**

analysis examines the relationship between specific figures on the financial statements and helps explain the significance of those figures:

- **Liquidity ratios** measure an organization's ability to generate cash.
- **Profitability ratios** measure an organization's ability to generate profits.
- **Debt ratios** measure an organization's ability to pay its debts.
- **Activity ratios** measure an organization's efficiency in operations and use of assets.

In addition, financial responsibility centers require managers to account for a unit's progress toward financial goals within the scope of their influences. A manager's goals and responsibilities may focus on unit profits, costs, revenues, or investments.

9.5.2 Budget controls

A budget depicts how much an organization expects to spend (expenses) and earn (revenues) over a time period. Amounts are categorized according to the type of business activity or account, such as telephone costs or sales of catalogs. Budgets not only help managers plan their finances, but also help them keep track of their overall spending.

A budget, in reality, is both a planning tool and a control mechanism. Budget development processes vary among organizations according to who does the budgeting and how the financial resources are allocated.

Marketing controls

Marketing controls help monitor progress toward goals for customer satisfaction with products and services, prices, and delivery. The following are examples of controls used to evaluate an organization's marketing functions:

- **Market research** gathers data to assess customer needs—information critical to an organization's success. Ongoing market research reflects how well an organization is meeting customers' expectations and helps anticipate customer needs. It also helps identify competitors.
- **Test marketing** is small-scale product marketing to assess customer acceptance. Using surveys and focus groups, test marketing goes beyond identifying general requirements and looks at what (or who) actually influences buying decisions.
- **Marketing statistics** measure performance by compiling data and analyzing results. In most cases, competency with a computer spreadsheet program is all a manager needs. Managers look at marketing ratios, which measure profitability, activity, and market shares, as well as sales quotas, which measure progress toward sales goals and assist with inventory controls.

Unfortunately, scheduling a regular evaluation of an organization's marketing program is easier to recommend than to execute. Usually, only a crisis, such as increased competition or a sales drop, forces a company to take a closer look at its marketing program. However, more regular evaluations help minimize the number of marketing problems.

9.5.3 Human resource controls

Human resource controls help managers regulate the quality of newly hired personnel, as well as monitor current employees' developments and daily performances.

On a daily basis, managers can go a long way in helping to control workers' behaviors in organizations. They can help direct workers' performances toward goals by making sure those goals are clearly set and understood. Managers can also institute policies and procedures to help guide workers' actions. Finally, they can consider past experiences when developing future strategies, objectives, policies, and procedures.

Common control types include performance appraisals, disciplinary programs, observations, and training and development assessments. Because the quality of a firm's personnel, to a large degree, determines the firm's overall effectiveness, controlling this area is very crucial.

9.5.4 Computers and information controls

Almost all organizations have confidential and sensitive information that they don't want to become general knowledge. Controlling access to computer databases is the key to this area.

Increasingly, computers are being used to collect and store information for control purposes. Many organizations privately monitor each employee's computer usage to measure employee performance, among other things. Some people question the appropriateness of computer monitoring. Managers must carefully weigh the benefits against the costs—both human and financial—before investing in and implementing computerized control techniques.

Regardless of the control processes used, an effective system determines whether employees and various parts of an organization are on target in achieving organizational objectives.

9.6 PRODUCTIVITY AND QUALITY

After companies determine customer needs, they must concentrate on meeting those needs by yielding high quality products at an efficient rate. Companies can improve quality and productivity by securing the commitments of all three levels of management and employees as follows:

- **Top-level management:** Implement sound management practices, use research and development effectively, adopt modern manufacturing techniques, and improve time management.
- **Middle management:** Plan and coordinate quality and productivity efforts.
- **Low-level management:** Work with employees to improve productivity through acceptance of change, commitment to quality, and continually improving all facets of their work.

Productivity is the relationship between a given amount of output and the amount of input needed to produce it. Profitability results when money is left over from sales after costs are paid. The expenditures made to ensure that the product or service meets quality specifications affect the final or overall cost of the products and/or services involved. Efficiency of costs will be an important consideration in all stages of the market system from manufacturing to consumption. Quality affects productivity. Both affect profitability. The drive for any one of the three must not interfere with the drive for the others. Efforts at improvement need to be coordinated and integrated. The real cost of quality is the cost of avoiding nonconformance and failure. Another cost is the cost of not having quality—of losing customers and wasting resources.

As long as companies continually interact with their customers and various partners, and develop learning relationships between all levels of management and employees, the levels of productivity and quality should remain high.

Lesson 10. Concepts of Marketing

10.1 INTRODUCTION

To prepare to be a marketer one need to understand what marketing is, how it works, what is marketed and how it evolved. In this chapter, meaning of market, marketing, marketing management, evolution of marketing concepts have been discussed.

10.2 MARKET

Word market comes from Latin word ‘Markets’ which merchandise or trade or a place where business is conducted.

Market in economic sense carries a board meaning

1. Market is sphere within which price determining forces operate.
2. A market in area within which force of demand & supply converge to establish a single price.
3. Term market refers, not to a place but to a commodity or commodities and buyers and sellers who are in free business relationship with one another. Thus market is defined in term of existence of fundamental forces of demand & supply and is not necessarily confined to a particular geographical location.

Components of market

1. Good or a commodity for transaction
2. Existence of buyers and sellers
3. Business relationship between buyers and sellers
4. Place where transaction takes place

10.3 MARKETING AND MARKETING MANAGEMENT

Marketing can occur any time a person or organization strives to exchange something of value with another person or organization. Thus at its core marketing is a transaction or exchange.

- In this broad sense marketing consists of activities designed to generate and facilities exchanges intended to satisfy human or organizational much or want
- Marketing is about identifying and meeting human and social needs.
- Shortest definition is “meeting needs profitably”.

- American marketing association marketing is an organizational function and a set of process for creating, communicating and delivering value to customers and for managing costumer relationships in ways that benefit organization and its stock holders.
- Marketing is a total system of business activities designed to plan, promote and distribute want satisfying products to target markets in order to achieve organizational objectives. This definition has two significant implications.
- Focus:- entire system of business activities should be costumer – oriented. Costumer’s wants must be recognize and satisfied.
- Duration:- marketing should start with an idea about a want satisfying product and should not end until customer’s wants are completely satisfied, which may be some time affair exchange is made.

Marketing Management is art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering and communicating superior customer value

10.4 WHAT IS MARKETED?

Mainly 10 types of entities are marketed: goods, services, events, experiences, persons, places, properties, organisations, information, and ideas. examples of these entities are presented below

1. **Goods:** Physical goods constitute bulk of most countries’ production and marketing efforts. Ex: Car, television, machines, etc
2. **Services:** hotels, hospitals, lawyers, barbers, banks, insurance companies etc.
3. **Events:** trade shows, artistic performances, film fare awards, Olympics, world cups
4. **Experiences:** By orchestrating several services and goods, a firm can create, stage and market experiences. Ex: Amusement park, Water Park, village ambiance in hotels in Mumbai etc.
5. **Persons:** Celebrity marketing is a major business. Artists, musicians, CEOs get help from celebrity marketers. Ex: Sachin Tendulkar, Aamir Khan, Amitabh Bachchan etc.
6. **Places:** Cities, states, region and nations compete actively to attract tourism. Ex: in software industry Bengaluru is positioned as “Silicon Valley” of India, Kerala is marketed as “Gods own country”, India is marketing it as a tourism destination through “Incredible India” advertisement campaign.
7. **Properties:** Properties are intangible rights of ownership of eir real property (real estate) or financial property (stock and bonds).
8. **Organisations:** Organisations actively work to build a strong, favourable and unique image in minds of target publics. Ex: Universities, Art organisations etc.

9. **Information:** Information is essentially what books, schools and universities produce market and distribute at a price to parents, students and communities.
10. **Ideas:** Every market offering includes a basic idea. Awareness about AIDS, family planning, discouraging smoking etc.

10.5 KEY CUSTOMER MARKETS

Based on type of customer served, market can be categorised into following four markets.

- i) **Consumer markets:** It consists of ultimate consumers who buy goods and services for their own personal or household use. Ex: Dairy Products, cosmetics, computer, camera etc.
- ii) **Business markets:** It consists of all individual and organisations that buy goods & services for one or more of following purposes.
 1. To make or goods & services: A food processing company purchases fruits to manufacture finished products like, fruit juice, jelly etc.
 2. To resell to or business users or to customers. Ex: Wholesaler or retailer
 3. To conduct organisations' operations. Ex: computers purchased by banks, universities.

Hence, any goods or service purchased for a reason other than personal or household consumption is part of business market.

- iii) **Global markets:** market other than their own nation where firm markets its products.
- iv) **Non-profit & Government markets:** Universities, charitable organisations & any or government organisations.

10.6 EVOLUTION OF MARKETING CONCEPTS

What philosophy should guide a company's marketing efforts? Increasingly, marketers operate consistent with a holistic marketing concept. Following is review of evolution of earlier marketing concepts or ideas.

- **Production Concept:** This is one of oldest concepts in business. It holds that consumers will prefer products that are widely available and inexpensive. Managers of production-oriented business concentrate on achieving high production efficiency, low costs and mass distribution.
- **Product Concept:** This concept proposes that consumers favour products that offer most quality, performance or innovative features. Managers in se organisations focus on making superior products and improving m over time.
- **Selling Concept:** This holds that consumers and businesses, if left alone, won't buy enough of organisation's products. Organisation must, therefore, undertake an aggressive selling and promotion effort. Selling concept is practiced most aggressively with unsought goods, goods that buyers normally do not think of

buying, such as insurance and encyclopaedias. Most firms also practice selling concept when they have overcapacity. Their aim is to sell what they make rather than make what market wants.

- **Marketing Concept:** Instead of a product-centred, “make-and-sell” philosophy, business shifted to a customer-centred and “sense-and-respond” philosophy. job is not to find right customers for your products, but to find right products for your customers. Ex: Dell Computers doesn’t prepare a perfect computer for its target market. Rather, it provides product platforms on which each person customises features he desires in computer.
- **Holistic Marketing Concept:** This concept is based on development, design and implementation of marketing programs, processes and activities that recognises its breadth and interdependencies. Holistic marketing is thus an approach that attempts to recognise & reconcile scope and complexities of marketing activities. This concept is characterised by four major components: relationship marketing, integrated marketing, internal marketing and performance marketing.
- **Relationship marketing:** It aims to build mutually satisfying long-term relationships with key constituents in order to earn and retain ir business. Four key constituents for relationship marketing are customers, employees, marketing partners (channels, suppliers, distributors, dealers, agencies) and members of financial community (shareholders, investors, analysts). Marketers must respect need to create prosperity among all se constituents and develop policies and strategies to balance returns to all key stakeholders.
- **Integrated Marketing:** marketer’s task is to devise marketing activities and assemble fully integrated marketing programs to create, communicate and deliver value for consumers. se marketing activities are classified as marketing mix tools of four broad kinds, called four Ps of marketing: product, price, place and promotion.
- **Internal Marketing:** Internal marketing is about ensuring that everyone in organisation embraces appropriate marketing principles, especially senior management. Internal marketing is task of hiring, training and motivating able employees who want to serve customers well. Internal marketing must take place in two levels. At one level, various marketing functions-sales force, advertising, customer service, product management, marketing research-must work together. At second level, or departments must embrace marketing; y must also “think customer”. Therefore, it requires vertical alignment with senior management and horizontal alignment with or departments.
- **Performance Marketing:** Holistic marketing incorporates performance marketing and understanding returns to business from marketing activities and programs, as well as addressing concerns and is legal, ethical, social and environmental effects.

10.7 DIFFERENCE BETWEEN SELLING AND MARKETING

Many managers use 'marketing' and 'selling' as synonyms though re is a substantial difference between both concepts. It is necessary to understand differences between m for a

successful marketing manager. Selling has a product focus and mostly producer driven. It is action part of marketing only and has short term goal of achieving market share. Emphasis is on price variation for closing sale where objective can be worded as “I must somehow sell product to customer”. This short term focus does not consider a prudential planning for building up brand in market place and winning competitive advantage through a high loyal set of customers. End means of any sales activity is maximizing profits through sales maximization.

When focus is on selling, businessman thinks that after production has been completed task of sales force starts. It is also task of sales department to sell whatever production department has manufactured. Aggressive sales methods are justified to meet this goal and customer's actual needs and satisfaction are taken for granted. Selling converts product in to cash for company in short run.

Marketing as a concept and approach is much wider than selling and is also dynamic as focus is on customer rather than product. While selling revolves around tile needs and interest of manufacturer or marketer, marketing revolves around that of consumer. It is whole process of meeting and satisfying needs of consumer. Marketing consists of all those activities that are associated with product planning, pricing, promoting and distributing product or service.

The task of marketing commences with identifying consumer needs arid does not end till feedback on consumer satisfaction from consumption of the product is received. It is a long chain of activity, which comprises production, packing, promotion, pricing, distribution and then selling. Consumer needs become guiding force behind all the activities. Profits are not ignored but they are built up on a long run basis. Mind share is more important than market share in Marketing. According to Prof. Theodore Levitt ' difference between selling and marketing is more than semantic. A truly marketing minded firm tries to create value satisfying goods and services which consumers will want to buy. What is offered for sale is determined not by seller but by buyers. Seller takes his cues from buyer and the product becomes consequence of marketing effort, not vice versa. Selling merely concerns itself with the tricks and techniques of getting customers to exchange their cash for company's products, it does not bother about value satisfaction that the exchange is all about. On contrary, marketing views entire business as consisting of a tightly integrated effort to discover, create, arouse and satisfy customer needs.

Lesson 11. Marketing Environment**11.1 INTRODUCTION**

Marketers need to be good at building relationships with customers, others in the company and external partners. To do this effectively, they must understand the major environmental forces that surround all of these relationships. A company's marketing environment consists of the actors and forces outside marketing that affect marketing management's ability to build and maintain successful relationships with target customers. The marketing environment is made up of a microenvironment and a macroenvironment. The microenvironment consists of the actors close to the company that affect its ability to serve its customers-the company, suppliers, marketing intermediaries, customer markets, competitors and publics. The macro- environment consists of the larger societal forces that affect the microenvironment-demographic, economic, natural, technological, political and cultural forces. Let us look first at company's micro-environment.

11.2 COMPANY'S MICROENVIRONMENT

Marketing management's job is to build relationships with customers by creating customer value and satisfaction. However, marketing managers cannot do this alone. Marketing success will require building relationships with other company departments, suppliers, marketing intermediaries, customers, competitors and various publics which combine to make up the company's value delivery network. Figure 11.1 shows these major actors in the marketer's microenvironment.

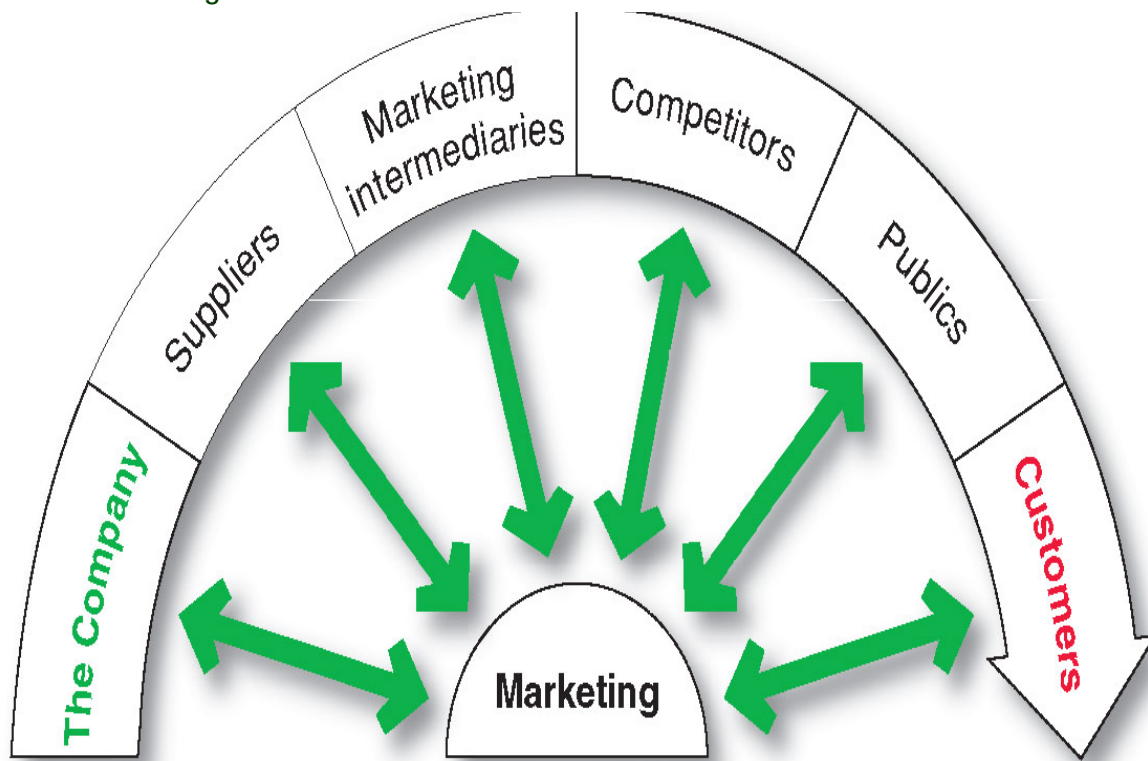


Figure 11.1: Actors in microenvironment

- **The company:** In designing marketing plans, marketing management takes other company groups into account-groups such as top management, finance, research and development (R&D), purchasing, operations and accounting. Top management sets the company's mission, objectives, broad strategies, and policies. Marketing managers make decisions within the strategies and plans made by top management. Marketing management must work closely with other company departments.
- **Suppliers:** Suppliers form an important link in the company's overall customer value delivery system. They provide the resources needed by the company to produce its goods and services. Supplier problems can seriously affect marketing. Marketing managers must watch supply availability-supply shortages or delays, labor strikes and other events can cost sales in the short run and damage customer satisfaction in the long run. Most marketers today treat their suppliers as partners in creating and delivering customer value.
- **Marketing Intermediaries:** Marketing Intermediaries help company to promote, sell and distribute its products to final buyers. They include resellers, physical distribution firms, marketing services agencies and financial intermediaries. Resellers are distribution channel firms that help the company find customers or make sales to them. These include wholesalers and retailers, who buy and resell merchandise. Physical distribution firms help the company to stock and move goods from their points of origin to their destinations. Working with warehouse and transportation firms, a company must determine the best ways to store and ship goods balancing factors such as cost, delivery, speed and safety. Marketing services agencies are the marketing research firms, advertising agencies, media firms and marketing consulting firms that help the company target and promote its products to the right markets. Financial intermediaries include banks, credit companies, insurance companies and other businesses that help finance transactions or insure against the risks.

Agribusiness Management and Trade

Companies and other businesses that help finance transactions or insure against the risks associated with the buying and selling of goods.

- **Customers:** The Company needs to study following types of customer markets closely. Consumer markets, Business markets, Government markets, Global markets. Each market type has special characteristics that call for careful study by the seller.
- **Competitors:** The marketing concept states that to be successful, a company must provide greater customer value and satisfaction than its competitors do. Thus marketers must do more than simply adapt to the needs of target consumers. They also must gain strategic advantage by positioning their offerings strongly against competitors' offerings in the minds of consumers.
- **Public:** Public is a group that has an actual or potential interest in or impact on an organisation's ability to achieve its objectives. The types of public are financial publics, media publics, government publics, citizen-action publics, local publics, general public and internal public.

11.3 THE COMPANY'S MACROENVIRONMENT

The company and all of the other actors operate in a larger macro-environment of forces that shape opportunities and pose threats to the company. Figure 11.2 shows the important actors in macroenvironment. In this section these external forces are discussed.

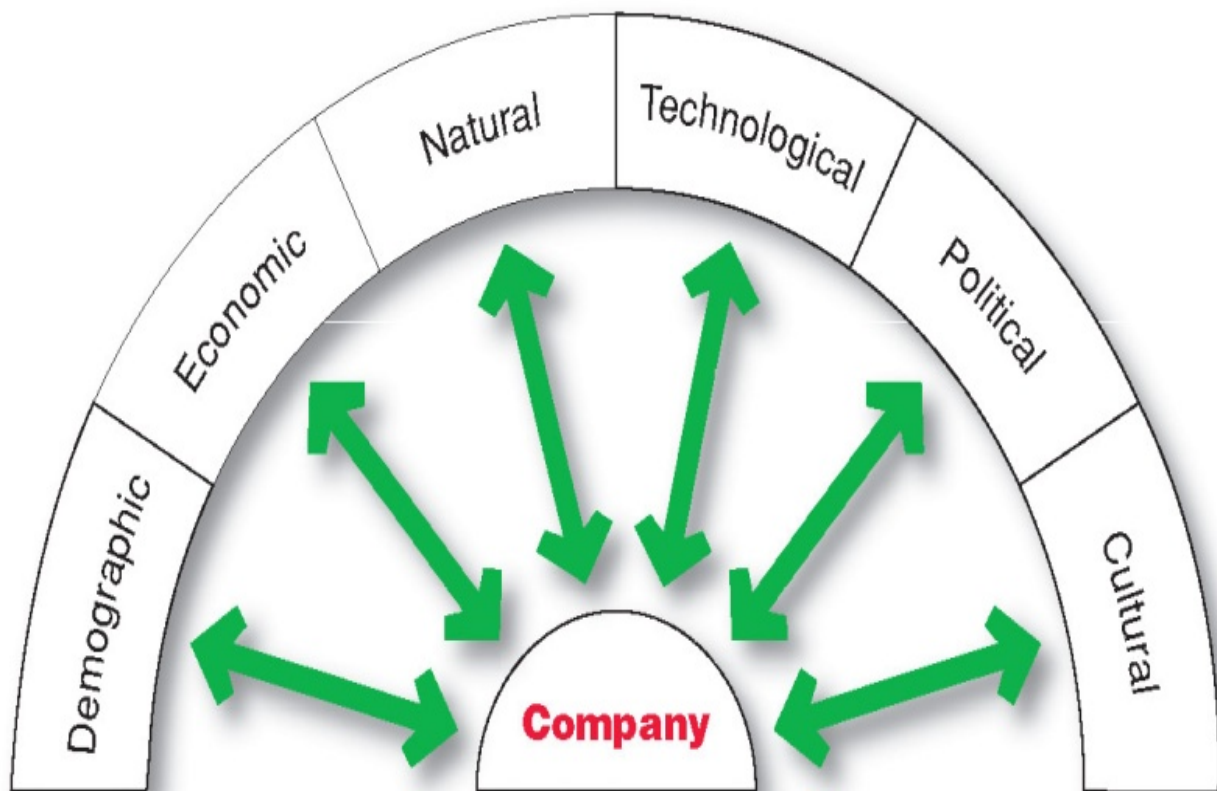


Figure 11.2: Actors in macroenvironment

- **Demographic Environment:** Demography is the study of human populations in terms of size, density, location, age, gender, race, occupation and other statistics. The demographic

environment is of major interest to marketers because it involves people and people make

Environment is of major interest to marketers because it involves people and people make up markets.

- **Changing age structure of the population:** The needs of the customer depend on the age group. The needs of the children will be different from the adult and the old. Therefore, it is very important for the company to study the age group of the customer it wants to target. For example, presently India has the one of the highest young population in the world. A successful company should produce goods to satisfy the need of this group.
- **Changing family system:** One need to understand the family structure prevailing the country. In India, the traditional joint family system is gradually replaced by the nuclear families. The needs of the nuclear families are different from the joint families.
- **Migratory population:** Migration of people from one state to another state and one country to another country in search of better standard of life is a common phenomenon. One can see people across the India in cities like Mumbai, Bangalore, and Hyderabad etc. A company manager needs to recognize this fact and plan his marketing strategy accordingly.
- **Economic Environment:** This consists of factors that affect consumer buying power and spending pattern. Following are the some of the major economic trends in India.
 - **Changes in income:** The disposal personal income of people has increased many folds in recent years. Therefore, people are spending heavily on consumer goods.
 - **Changing consumer spending patterns:** As the income increases the percentage spent on food declines, the percentage spent on housing remains about constant and both percentage spent on most other categories and that devoted to savings increases. Even among the income spent on food, more expenditure is on value added products like, fruits, vegetables, eggs, meat etc.
- **Natural Environment:** Natural resources that are needed as inputs by marketers or that are affected by marketing activities.
- **Technological Environment:** Forces that create new technologies, creating new product and market opportunities. Technological environment changes rapidly. Change from film to digital camera has resulted in losing market leader status for some companies. One who do not foresee coming of the new technology will have to face the adverse consequences.
- **Political Environment:** Marketing decisions are strongly affected by developments in the political environment. The political environment consists of laws, government agencies and pressure groups that influence or limit various organizations and individuals in a given society.
- **Cultural Environment:** It is made of institutional and other forces that affect a society that shapes their basic beliefs, values, perceptions, preferences and behaviors. People grow up in a particular society that shapes their basic beliefs and values. They absorb a worldview that defines their relationships with others.
 - **Language:** The importance of language differences cannot be overemphasized as

Agribusiness Management and Trade

- **Language:** The importance of language differences cannot be overemphasized, as there are almost 3,000 languages in the world. Language differences cause many problems for marketers in designing advertising campaigns and product labels. Language problems become even more serious once the people of a country speak several languages. For example, in Canada, labels must be in both English and French. In India, there are over 200 different dialects, and a similar situation exists in China. Figure 1
- **Colors:** Colors have different meanings in different cultures. For example, in Egypt, the country's national color of green is considered unacceptable for packaging, because religious leaders once wore it. In Japan, black and white are colors of mourning and should not be used on a product's package. Similarly, purple is unacceptable in Hispanic nations because it is associated with death.
- **Customs and Taboos:** All cultures have their own unique set of customs and taboos. It is important for marketers to learn about these customs and taboos so that they will know what is acceptable and what is not for their marketing programs.
- **Values:** An individual's personal values arise from his/her moral or religious beliefs and are learned through experiences. For example, in America we place a very high value on material well-being, and are more likely to purchase status symbols than people in India. Similarly, in India, the Hindu religion forbids the consumption of beef, and fast-food restaurants such as McDonald's and Burger King would encounter tremendous difficulties without product modification. Additionally, Americans spend large amounts of money on soap, deodorant, and mouthwash because of the value placed on personal cleanliness.
- **Aesthetics:** The phrase "Beauty is in the eye of the beholder" is a very appropriate description for the differences in aesthetics that exist between cultures. For example, Americans believe that suntans are attractive, youthful, and healthy; however, the Japanese do not.
- **Time:** Americans seem to be fanatical about time when compared to other cultures. Punctuality and deadlines are routine business practices in the U.S. However, salespeople who set definite appointments for sales calls in the Middle East and Latin America will have a lot of time on their hands, as business people from both of these cultures are far less bound by time constraints. To many of these cultures, setting a deadline such as "I have to know next week" is considered pushy and rude.
- **Business Norms:** Business norms also vary from one country to the next and may present challenges to foreigners not used to operating within the particular norms of the host country
- **Religious Beliefs:** Religion can affect shopping patterns and products purchased, in addition to the consumers' values, as discussed earlier. In the United States and other Christian nations, Christmas time is a major sales period. But for other religions, religious holidays do not serve as popular times for purchasing products. Women do not participate in household buying decisions in countries whose religion serves as opposition to women's rights.
- Every culture has a social structure, but some seem less widely defined than others

Agribusiness Management and Trade

- Every culture has a social structure, but some seem less widely defined than others. That is, it is more difficult to move upward in a social structure that is rigid. For example, in the U.S., the two-wage-earner family has led to the development of a more affluent set of consumers. But in other cultures, it is considered unacceptable for women to work outside the home.

Lesson 12. Product Development and Product Lifecycle

12.1 INTRODUCTION

In this chapter we will be studying the meaning of product, different levels of product, classification of products, process of new product development and finally the stages of product lifecycle. The studies have shown the before coming to a successful or even usable idea for new product development, it has to come up with thousands of ideas. Therefore it would be interesting to know how a company goes through different steps in developing a new product. After launching a new product, management wants the product to stay in the market for long time. Therefore, finally we will discuss about the product life-cycle.

12.2 PRODUCT AND LEVELS OF PRODUCT

Product: It is defined as anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a want or need. Products include more than just tangible goods. Broadly defined products include physical objects, services, events, persons, places, organisations, ideas, or mixes of these entities.

Product planners need to think about products on three levels (fig 12.1). Each level adds more customer value. The most basic is the *core benefit*, which addresses the question, what is the buyer really buying? When designing products, marketers must first define the core, problem-solving benefits that consumer seeks.

At the second level, product planners must turn the core benefit into an *actual product*. They need to develop product and service features, design, a quality level, a brand name and packaging.

Finally, product planners must build an *augmented product* around the core benefit and actual product by offering additional consumer services and benefits.

12.3 PRODUCT CLASSIFICATIONS

Products may be classified into two broad classes based on the types of consumers that use the products. They are consumer products and industrial products.

- **Consumer Products:** Products bought by final consumers for personal consumption. Marketers usually classify these products further based on how consumers go about buying them. They are as follows,
 - **Convenience Products:** Consumer products that the consumer usually buys frequently, immediately, and with a minimum of comparison and buying efforts.

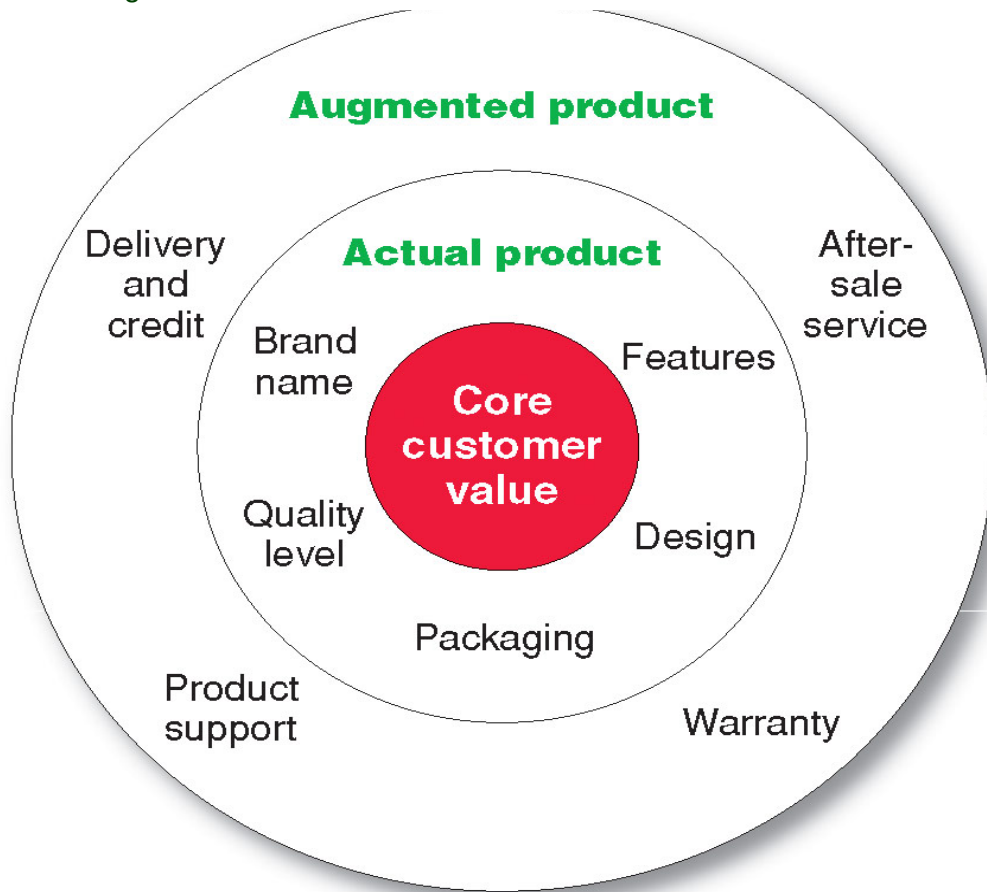


Figure 12.1: Three levels of product

Examples include, soap, newspapers, fast food etc. Convenience products are usually low priced, and marketers place them in many locations to make them readily available when consumers need them.

- **Shopping Product:** Consumer good that the customer, in the process of selection and purchase, characteristically compares on such bases as suitability, quality, price and style. Examples, furniture, clothing, major appliances etc.
- **Specialty Product:** Consumer product with unique characteristics or brand identification for which a significant group of buyers is willing to make a special purchase effort. Examples, specific brands of cars, designer clothes, services of medical and legal specialists etc.
- **Unsought Products:** Consumer product that the consumer either does not know about or knows about but does not normally think of buying. Example, insurance.
- **Industrial Products:** Product bought by individuals and organisations for further processing of for use in conducting a business. The three groups of industrial products include materials and parts, capital items, and supplies and services.

12.4 TERMINOLOGIES USED IN PRODUCT MIX DECISIONS

Product line: A group of products that are closely related because they function in a

Product line. A group of products that are closely related because they function in a similar manner, are sold to the same customer groups, are marketed through the same type of outlets, or fall within given price range. Example, Nike produces several lines of athletic shoes and apparel.

Product line length: The number of items in the product line.

Product mix or Product portfolio: The set of all product lines and items that a particular seller offers for sale.

Product mix width: It refers to the number of different product lines the company carries.

Product mix length: It refers to the total number of items the company carries within the product lines.

Product mix depth: Refers to the number of versions offered of each product in the line.

Consistency of product mix: refers to how closely related the various product lines are in end use, production requirements, distribution channels, or some other way.

12.5 NEW PRODUCT DEVELOPMENT PROCESS

A firm can obtain new product through two ways, either by acquisition or by new-product development in company's own R&D department. Here, new product means, development of original products, product improvements, product modifications and new brands through the firm's own R&D efforts.

Do all new products succeed? Obviously the answer is no. Studies indicate that up to 90% of all new consumer product fail. According to Harvard Business Review, 2006, of 3000 new food, beverages and beauty products launched each year, 70-90% products fail within just 12 months. The question arises, why do they fail? The possible reasons are as follows.

- Though the idea may be good, company may overestimate market size
- Actual product may be poorly designed
- Product may be incorrectly positioned
- May be launched at wrong time
- Product may not be priced correctly
- May be poorly advertised, etc.

All this makes study of new product development process more important.

New product development process involves following steps.

- a) **Idea Generation:** It is systematic search for new product ideas. Here the emphasis of the management will be to obtain as many as ideas as possible. The source of ideas may be either *internal* viz, executives, scientists, engineers, manufacturing staff and sales people, or *external* viz, customer, competitors,

manufacturing staff and sales people, or external viz, customer, competitors, distributors & suppliers, magazines, shows & seminars, research institutions, universities, market research firms, etc.

b) Idea Screening: This is the second step, where the emphasis will be on reducing the number of ideas generated. The objective is to spot good ideas & drop poor ones as soon as possible.

c) Concept Development & Testing: Product concept is the detailed version of the new product idea stated in meaningful customer terms. Once the product concept is developed

d) Market Strategy & Development

e) Business Analysis

f) Product Development

g) Test Marketing

h) Commercialisation

Lesson 13. Product Pricing and Pricing Strategies

13.1 INTRODUCTION

There is fierce competition and fast-changing environment in the business. Cutting prices is not always the best answer to fight the competition. Reducing prices unnecessarily may lead to loss of profits. It may even signal to customers that the price is more important than the value.

Price in the narrowest sense can be defined as the amount of money charged for a product or service. However, in broader terms, it is the sum of all the values that customers give up in order to gain the benefits of having or using a product or services.

13.2 FACTORS TO BE CONSIDERED WHILE SETTING PRICES

The price charged by the company falls between that is too high to produce any demand and one that is too low to produce profit. Therefore, production cost sets the floor price and products value perceived by the consumer sets the upper limit. The following figure summarizes the factors responsible for setting products price.



Source: Philip Kotler, Principles of Marketing

1. Customer Perception of Value: Good pricing begins with a complete understanding of the value that a product or service creates for customers. If the price set for the product is more than the consumer's perceived value, then the product will not be sold in the market.

Therefore, the price of the product should be less than or equal to the consumer's perceived value of the product. Thus it sets the upper limit for the price. Considering this factor, the value based pricing approach is designed. According to this approach the marketer cannot design a product & marketing program & then set a price. Price is considered along with the other marketing mix variables before marketing program.

2. Production Costs: Production costs sets the lower limit for the price in the long run. If a product is priced below its production costs, the firm will incur loss and thus may close down in the long run. The cost based pricing approach considers this factor. It involves setting prices based on the costs of producing, distributing and selling the product plus a fair rate of return for effort and risk.

3. Other internal and external considerations:

1. Overall marketing strategy, objectives, and mix:

- Price is only one element of the company's broader marketing strategy. If the company has selected its target market & positioning carefully, then its marketing strategy will be straightforward.
- Price depends on the objective company wants to achieve. It may be survival, profit maximisation, market share leadership, customer retention & relationship building
- Price decision must be coordinated with product design, distribution, and promotion decisions to form consistent & effective integrated marketing programmes.

2. Organisation considerations: The price also depends on the person in the organisation who decides the price.

3. The market & demand: Before setting the price, pricing decision should obviously consider the expected demand for the product. This price demand relationship differs for different types of market.

- Pricing in different types of markets

- Pure competition: This is type of market where there exist many sellers and many buyers. No single buyer or seller can influence the prevailing market prices. Therefore the pricing decision here should be just as per the prevailing market.
- Monopolistic competition: The market consists of many buyers and many sellers with differentiated product trade over range of prices. Physical product is differentiated through quality, features, style, service etc.
- Oligopolistic competition: Market consists of few sellers who are highly sensitive to each other's pricing and marketing strategies. If a steel company slashes its prices, buyers will switch to this product. Therefore, other companies have to reduce their prices.

- **Pure monopoly:** The market consists of one seller and many buyers. Seller may be government monopoly, private regulated monopoly of a private non regulated monopoly. Pricing is handled differently in each case. In regulated monopoly, government permits the company to set prices that yield fair return. Non-regulated monopolies are free to set prices at what market will bear.

- **Analysing price demand relationship:** This relationship is shown by demand curve. A curve that shows the number of units the market will buy in a given time period, at different prices that might be changed. In normal case the price demand are inversely related. Thus company would sell less if it raised its price. However, in case of prestige goods, demand curve slopes upward. Consumers think higher price means higher quality.

- **Price elasticity of demand:** A measure of the sensitivity of demand to changes in price. If the demand is elastic, the seller will consider lowering their prices. A lower price will yield more total revenue.

4. Competitor's strategy and prices: In setting prices, company must also consider competitor's costs, prices and market offerings.

5. Other external factors: Economic condition of the nation, government, social concerns etc.

13.3 NEW PRODUCT PRICING STRATEGIES

- **Market skimming pricing:** Setting a high price for a new product to skim maximum revenues layer by layer from the segments willing to pay high price. Here, company makes fewer but more profitable sales. The examples are HDTV, Blackberry cell phones. For this strategy to be successful, the product must satisfy the following conditions.
 - Product quality and image must support high price
 - There must be enough buyers for the product
 - Cost of producing small volumes must not be high
 - Competitors should not enter market easily and undercut the high price
- **Market penetration pricing:** Low initial price to penetrate market quickly and deeply. To achieve success in this strategy, following conditions should prevail.
 - Market must be highly price sensitive.
 - Production and distribution cost must fall as sales volume increases
 - Low price must keep competitors away.

13.4 PRODUCT MIX PRICING STRATEGIES

The strategy for setting a product's price is often changed when the product is part of a product mix. In this case, the firm looks for a set of prices that maximises the profits on the total product mix. Pricing is difficult because the various products have related demand and costs and face different degrees of competition.

There are mainly five product mix pricing strategies

- **Product line pricing:** Companies usually develop product lines rather than single product. In product line pricing, management must decide on the price steps to set between the various products in a line. The price steps should take in to account cost differences between the products in the line, customer evaluations of their different features and competitors' prices.
- **Optional-product pricing:** The pricing of optional or accessory products along with a main product.
- **Captive-product pricing:** Companies that make products that must be used along with a main product are using captive-product pricing. This is setting a price for products that must be used along with a main product, such as printer cartridges with printers. HP makes very low margin on its printers but very high margins on printer cartridges.
- **By-product pricing:** Setting a price for by-products in order to make the main product's price more competitive. In producing meats, petroleum and agricultural products, there are often by-products. If the by-products have no value and if getting rid of them is costly, this will affect the pricing of the main product. Using by-product pricing, the manufacturer will seek a market for these by-products and should accept any price that covers more than the cost of storing and delivering them.
- **Product bundle pricing:** Combining several products and offering the bundle at a reduced price. For example, fast-food restaurants bundle a burger, fries and a soft drink at a combo price.

13.5 PRICE ADJUSTMENT STRATEGIES

Companies usually adjust their price to account for various customer differences and changing situations. Seven price adjustment strategies are briefly discussed below.

- **Discount and Allowance Pricing:** Most of the companies adjust their basic price to reward customers for certain responses such as early payment of bills, volume purchases and off-season buying. These price adjustments are called discounts and allowances. **Discount** means a straight reduction in price on purchases during a stated period of time. **Allowances** are another type of reduction from the list price. For example, trade-in allowances are price reductions given for turning in an old item when buying a new one. This is followed with many durable goods.
- **Segmented Pricing:** Companies will often adjust their prices to allow for difference in customers, products, and locations. In segmented pricing, the company sells a product or service at two or more prices, even though the differences in prices are not based on differences in costs.
- **Psychological Pricing:** A pricing approach that considers the psychology of prices and not simply economics; the price is used to say something about the product. For example, consumers usually perceive higher priced products as having higher quality. Another aspect of psychological pricing is reference pricing. For example, the fact that

a product is sold in a prestigious department store might signal that it's worth higher price.

- **Promotional Pricing:** Temporarily pricing products below the list price, and sometimes even below cost, to increase short-run sales.
- **Geographical Pricing:** Setting prices for customers located in different parts of the country or world. A company also must decide how to price its products for customers located in different parts of the country or world. Should the company risk losing the business of more-distant customers by charging them higher prices to cover the higher shipping costs? Or should the company charge all customers the same prices regardless of location? The pricing strategy which considers these aspects geographical pricing.
- **Dynamic Pricing:** Adjusting prices continually to meet the characteristics and needs of individual customers and situations.
- **International Pricing:** Companies that market their products internationally must decide what prices to charge in the different countries in which they operate. The price that a company should charge in a specific country depends on many factors, including economic conditions, competitive situations, laws and regulations, and development of wholesaling and retailing systems.



Lesson 14. Distribution Decisions

14.1 INTRODUCTION

The product which is manufactured by a firm ultimately has to reach the consumer. However, there is geographical separation between the producer and consumer. Therefore, there is a need to ultimately bridge the gap between these two. Though the ultimate aim of a producer is that a product should reach the consumer, but it is more important that it reaches more effectively and efficiently compared to the competitors. In this chapter, we will be discussing the meaning and functions of distribution channels and factors influencing the choice of a particular channel.

14.2 CONCEPT OF DISTRIBUTION CHANNELS

Distribution channel also called the marketing channel consists of a set of people and firms involved in the transfer of title to a product as the product moves from producer/manufacturer to consumer. Thus, a distribution channel is primarily concerned with the movement of goods from the point of production to the point of consumption, which involves a variety of functions. The main participants in the distribution system are: (1) the manufacturers, (2) the intermediaries, (3) the facilitating agencies, and (4) the consumers. **Manufacturers** produce the goods. This is the starting point in the distribution system. The second category of participants i.e., **intermediaries**, are involved in direct negotiation between buyers and sellers whether or not they take title to goods. These intermediaries locate the manufacturers who produce various products, identify the needs of the consumers and distribute the goods. In the process, they perform various functions like buying, selling, assembling, standardization and grading, packing and packaging, risk bearing, etc. **Facilitating agencies** are the independent business organisations other than intermediaries. These agencies facilitate the smooth distribution of goods from producers, through intermediaries, to consumers. The major facilitating agencies are banking institutions, insurance companies, transportation agencies and warehousing companies. The fourth category of participants in the distribution system i.e., **consumers**, are the final destination for goods in the distribution system.

A Channel of distribution is mainly concerned with second participant i.e., the intermediaries. The term '**Channel of Distribution**' refers to the route taken by goods as they flow from the producer to the consumer. This flow of goods may mean its physical distribution and/or the transfer of title (ownership). Channels of distribution are mainly concerned with the transfer of title to a product which may be effected directly or through a chain of intermediaries. You know most producers do not sell goods directly to the consumers. They make use of a variety of intermediaries known as middlemen. These middlemen who take title to goods or assist in transferring the title to goods as they move from the producer to the consumer is called the channel of distribution. Thus, distribution

channel is a network of institutions that perform a variety of interrelated and coordinated functions in the movement of goods from producers to consumers.

A distribution channel creates place, time, form and possession utilities to the products by prompt and efficient performance of the function of physical distribution. A distribution channel helps in the movement of goods from producer to consumer and, thus, creates place utility to the product. Distributional channel makes it possible for the consumers to get the product whenever they want and thus creates the time utility. Similarly, a distribution channel makes it possible for the consumers to get the products in a convenient shape, unit size, style and package. Thus, it creates convenience value. Distribution channel also makes it possible for the consumer to obtain goods at a price he is willing to pay and under conditions which bring him satisfaction and pride of ownership. Thus, it creates possession utility.

14.3 FUNCTIONS OF DISTRIBUTION CHANNELS

Broadly, distribution channels perform the transactional functions, logistical functions and facilitating functions. In specific terms, distribution channel perform the following functions:

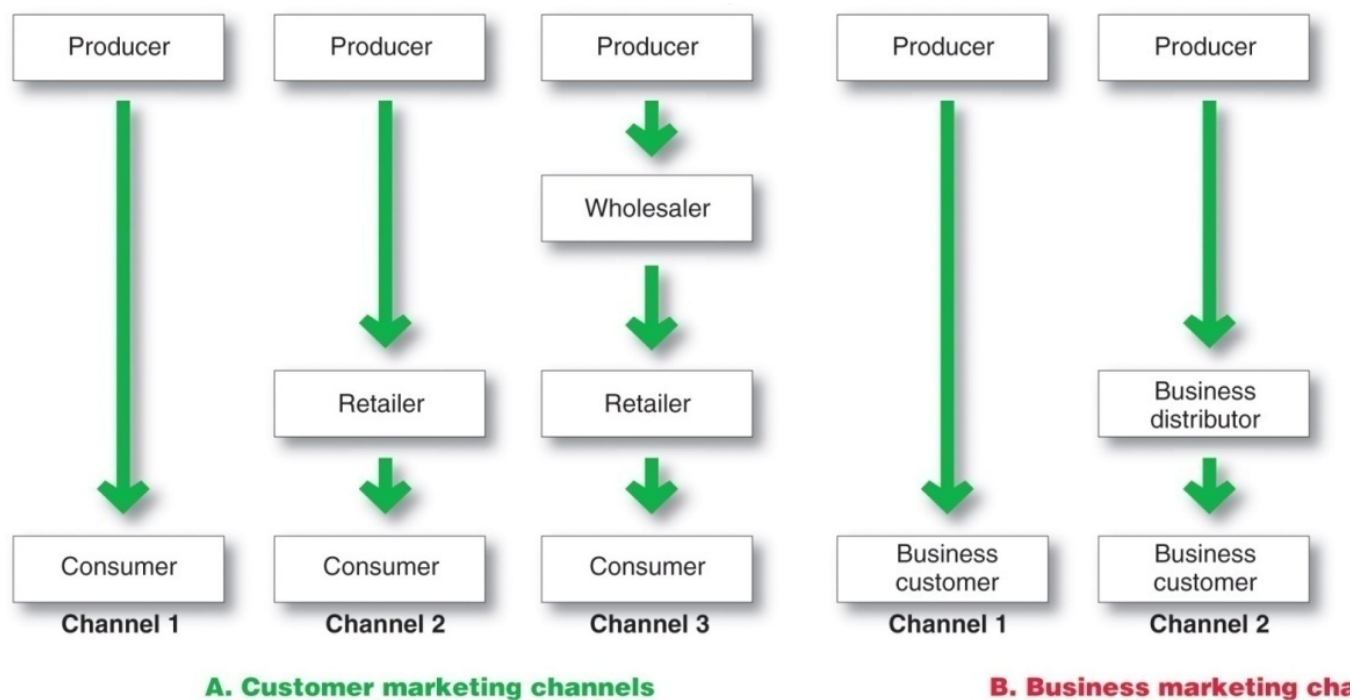
- Facilitate selling by being physically close to customers
- Provide distributional efficiency by bridging the manufacturer with the user efficiently and economically
- Break the bulk and cater to the small requirements of buyers
- Assemble products into assortments to meet buyer's needs;
- Look after a part of physical distribution¹ marketing logistics
- Share the financial burden of the principal; provide deposits; finance the stocks till they are sold to the ultimate consumers; extend credit to the retailers/consumers.
- Provide salesmanship and after-sale service
- Assist in sales promotion
- Assist in merchandising
- Assist in introducing new products
- Assist in implementing the price mechanism: assist in price negotiations
- Assist in developing sales forecasts I sales plans for the territory
- Provide market intelligence and feedback
- Maintain records
- The searching out of buyers and sellers (contacting).
- Matching goods to the requirements of market. (merchandising).

Agribusiness Management and Trade

- Offering products in the form of assortments or packages of items useable or acceptable by the consumers.
- Persuading and influencing the prospective buyers to favour a certain product and its maker (personal selling/sales promotion)
- Implementing pricing strategies in such a manner that will be acceptable to the buyers and ensure effective distribution.
- Looking after all physical distribution function.
- Participating actively in the creation and establishment of the market for a new product.
- Offering pre and after sales services to the customer
- Transferring new technology to the users along with the supply of products and playing the role of change agents
- Providing feedback information, marketing intelligence and sales forecasting services for their regions to their suppliers
- Offering credit to retailers and consumers
- Risk bearing with reference to stock holding / transport.

14.4 DISTRIBUTION CHANNELS USED

The marketing channels for consumer and industrial products is given in the figure



Source: Philip Kotler, Gary Armstrong (2009)

Channels for Consumer Products

These channels are used for consumer durable goods which are directly consumed by the household. For example, TV, car, food items etc. Following levels of channel are used for this purpose.

Producer ---consumer: The shortest, simplest distribution channel for consumer goods involves no middlemen. The producer may sell door to door or by mail.

Producer-retailer-consumer: Many large retailers buy directly from manufacturers and agricultural producers. To the chagrin of various wholesaling middlemen, Wal-Mart has increased its direct dealings with producers.

Producer- wholesaler-retailer-consumer: If there is a traditional channel for consumer goods, this is it. Small retailers and manufacturers find these channels the only economically feasible choice.

Producer-agent-retailer-consumer: Instead of using wholesalers, many producers prefer to use agent middlemen to reach the retail market, especially large scale retailers

Producer -agent-wholesaler-retailer-consumer: To reach small retailers producers often use agent middlemen, who in turn call on wholesalers that sell to large retail chains and/or small retail stores.

Channels for Industrial Products

A variety of channels are available to reach organizations that incorporate the products into their manufacturing process or use them in their operations. In the distribution of business goods, the terms **industrial distributor** and **merchant wholesaler** are synonymous. The four common channels for business goods are:

Producer-user: The direct channel accounts for a greater dollar volume of business products than any other distribution structure. Manufacturers of large installations, such as airplanes generator, and heating plants usually sell directly to users.

Producer-industrial distributor-user: Producers of operating supplies and small accessory equipment frequently use industrial distributors to reach their markets. Manufacturers of building materials and air-conditioning equipment are two examples of firms that make heavy use of industrial distributors.

Producer-agent –user: Firms without their own sales department find this a desirable channel. Also a company that wants to introduce a new product or enter a new market may prefer to use agents rather than its own sales force.

Producer- agents -industrial distributor - user: This channel is similar to the preceding one. It is used when, for some reason, it is not feasible to sell through agents directly to the business user. The unit sale may be too small for the direct selling. Or decentralized inventory may be required to supply users rapidly, in which case the storage services of an industrial distributor may be required.

14.5 FACTORS INFLUENCING THE CHOICE OF CHANNEL

As seen in this chapter, there are different channels, some are short, while some are long. Which one to use, depends on different factors like type of market, type of product, middlemen and company considerations. These factors are discussed below;

Product considerations:

- **Perishability:** Perishable products like milk, eggs, etc., are supplied either directly or through the short channels.
- **Bulkiness:** In the case of heavy and bulky products (e.g., cement, steel, heavy machinery, etc.) where distribution and handling costs are more, short channels are preferred.
- **Technical nature of the product:** Sophisticated electrical and electronics equipment which require careful handling are also generally distributed directly or through short channels.
- **Product value:** Normally larger channels are preferred for products whose unit value is low. However, short channels may be equally economical when such products are sold in bulk or are combined with other products.

Market considerations:

- **Potential volume of sales:** The choice of channel depends upon the target volume of business. The ability to reach target customers and the volume of sales varies between different channels. If one outlet is not adequate for achieving the target, more channels need to be used.
- **Concentration of buyers:** If the buyers are concentrated in a few areas, it is possible for the manufacturer to establish sales divisions in such areas and sell directly to the buyers. Thus, short channels may be feasible when buyers are concentrated in fewer locations. On the other hand, if buyers are spread over a large geographic area, short channels may become uneconomical and the manufacturer may have to go for long and multiple channels.
- **Size of the purchase order:** Manufacturer can distribute directly or through a short channel in the case of large scale buyers. Normally long channels are effective and economical in the case of buyers whose purchase orders are usually too small to justify direct sale.

Middlemen Considerations

- **Types of middlemen:** Functions like standardisation, grading, packing, branding, storage, after sale servicing, etc., are expected to be performed by middlemen. Efficiency of distribution depends upon the size, location and financial position of middlemen. If the middlemen in a specific channel are dependable and efficient, that channel may be preferred by producers.
- **Channel competition:** There are different situations in which manufacturers compete with each other for availing the services of particular wholesalers. Similarly, wholesalers often compete with each other to deal with particular retailers or carrying

particular brands of products. Sometimes producers use the same channel which is used by their competing producers. If any producer arranges exclusive distribution through a particular wholesaler, the other producers also do the same. Thus selection of a channel may depend on the competition prevailing in the distribution system.

- **Availability of middlemen:** The producer may wish to make use of the services of specific category of middlemen, but such middlemen may not be available in the market. They may be carrying the competitors' products and may not wish to add another product line. In such situations, the manufacturer has to make use of the services of the middlemen whoever available in the

Company considerations:

- **Cost of distribution:** A channel which is less expensive is normally preferred. Sometimes, a channel which is convenient to the customers is preferred even if it is more expensive. In such cases the choice is based on the convenience of the customers rather than the cost of distribution.
- **Long-run effect on profit:** Direct distribution, short channels, and long channels have different implications with regard to the profits in the short-run and long-run. If demand for a product is high, reaching the maximum number of customers through more than one channel may be profitable. But the demand may decline in course of time as competing products appear in the market. It may not be economical than to use long channels. So while choosing a channel one should keep in mind the future market implications as well.
- **Experience and ability:** A manufacturer who has reasonable experience and expertise in marketing the products may prefer to distribute his products on his own. But the manufacturers who do not have marketing know-how prefer to make use of the services of middlemen.
- **Financial strength:** Lots of financial resources are required to establish distribution system. So only a financially strong manufacturer can establish his own distribution system and a financially weak firm may have to depend on middlemen.
- **Extent of channel control:** Producers who want good control over the distribution of their products prefer short channels. Controlling of the channels is necessary to undertake aggressive promotion, to maintain fresh stocks and retail. Thus, in making a choice; the manufacturer has to consider his objectives, resources and the channels available to him, nature of the product and characteristics of the buyers. He would like to use the channel of distribution which will produce the combination of sales volume and cost that yields him the maximum amount of profit. There are no set guidelines for channel selection and the manufacturer will have to make his own decision in the light of his own judgment and experience. However, most companies do use multiple channels of distribution to ensure that their products reach the maximum number of people.

Lesson 15 Promotional Decisions

15.1 INTRODUCTION

The marketing environment is competitive today. For a manager, in order to carry out efficient marketing, it is not sufficient to develop a good product, price it competitively, make it easily available to target market it must also develop effective marketing communication for disseminating the relevant and pertinent marketing information about the product availability, features and terms and explain how these will provide the benefits to the target market. Therefore, every company in order to survive and grow has to play the role of an effective communicator in the present competitive environment. Marketing communication plays an important role in a company's overall marketing program.

15.2 THE PROMOTION MIX (MARKET COMMUNICATION MIX)

Marketing communication can be defined as the process of systematic and scientific way of disseminating the relevant marketing information by a company to its target market and other public by using a mix of media. A company through its marketing communication tries to persuade its target market to purchase its products and services vis-a-vis its competitors. Since marketing communication aims at influencing the consumer behaviour in favour of the company's offerings, this is persuasive in nature. Various persuasive marketing communication tools are more commonly called 'Promotion' and constitute one of the four Ps of the marketing mix which was popularized by Jerome McCarthy in 1964. Thus marketing communication refers to the various promotion tools used by marketers to exchange persuasive messages and information to its target market and other public.

Promotion mix is the specific blend of advertising, sales promotion, public relations, and direct-marketing tools that the company uses to persuasively communicate customer value and build customer relationships. In the following sections we will discuss these tools of promotional mix.

15.3 ADVERTISING AND PUBLIC RELATIONS

Advertising is any paid for of non personal presentation and promotion of ideas, goods, or services by an identified sponsor. **Public relations** deals with building good relations with the company's various publics by obtaining favourable publicity, building good corporate image, and handling or heading off unfavourable rumours, stories, and events. **Key features of advertising** are;

Advertising is a form of communication for which payment has been made to the media composite which has carried the communication. When there is no direct payment or no payment, it is called publicity.

- The communication process is non personal as nobody has personally conveyed the message i.e., there is no personal contact between the sender and the receiver of the

message. When a retail salesman speaks to us in the sales counter, we can call it as personal selling as there is direct interaction between the receiver (buyer) and the sender (the salesman)

- The presentation of the message is for promoting ideas, places, concepts, people, parties, goods, services, organizations to create awareness and assist in the process of consumer decision making. The awareness may lead to persuasion and hence the consumer may be triggered to take a decision about buying the product or service being advertised.
- The sponsor is identified in the advertisement either in the form of the brand name or in the form of the company which produces it. This is relevant as the ownership of message communicated rests with the sender. If the sponsor is not identified then the objective of the message will be lost as the potential buyer is not sure where to search for further information in the form of enquiry or to go for a consumption choice.

15.3.1 Advertising Objective:

Advertising is a method of communication with a specified objective. The objectives of advertising as explained before are grouped as sales objectives (measured in terms of increase in sales, increase in market share and return on investment) and communication objectives. The communication objectives of advertising can be grouped into the following;

Building awareness (informing): The first task of any advertising is to make the audience appreciate that the product or service exists and to explain exactly what it is

Creating favorable attitude (persuasion): The next stage and the one that preoccupies most advertisers, is to create the favorable attitude to the brand which will eventually lead the consumers to switch their purchasing pattern

Maintenance of loyalty (reinforcement): One of the tasks which is often forgotten is that of maintaining loyalty of existing customers who will almost always represent the main source of future sales.

15.3.2 Benefits of advertising:

The benefits of the advertising to different stake holders are given below;

Benefits to Producers: Advertising is beneficial to producers in the following

It leads to an increase in sales volume. This increase in sales volume leads to a higher rate of production, which in turn may lead to economies of scale resulting in a lower cost per unit. Further, in the absence of advertising, the company would be spending more money on other expensive means of promotions such as personal selling and sales promotion.

Advertising helps in easy introduction of products in the market.

It helps to establish direct contact between manufacturers and customers

Benefits to the Middlemen: Middlemen, particularly wholesalers and retailers derive the following benefits from advertising:

- It is easier for them to sell products because consumers are aware of the product and its quality through advertising.
- The product reputation which is created through advertising is shared by wholesalers and retailers alike.
- It enables wholesalers and retailers to acquire product information.

Benefits to Customers: Advertising is beneficial to customers in the following

- Advertising stresses quality and very often prices. This forms an indirect guarantee to customers. Furthermore large scale production assured by advertising enables the seller to reduce the production cost and sell the product at a lower price.
- It helps the customers to know where and when the products are available.
- This reduces their shopping time
- It provides an opportunity for customer to compare the merits and demerits of various substitute products. Modern advertisements are highly informative. It is perhaps the only means through which consumers come to know about varied and new uses of products.
- Modern advertisements are highly informative. It is perhaps the only means through which consumers come to know about varied and new uses of products.

Benefits to the Community: Community as a whole also derives the following benefits:

- Advertising leads to large-scale production, thus creating more employment opportunities. It assures employment opportunities to advertising professionals i.e. artists, copywriters etc.
- It starts a process of creating more wants and their satisfaction, resulting in a higher standard of living. Advertising has made more popular and universal a number of inventions such as automobiles, radios, TVs and other household appliances.
- Newspapers would not have become so cheap and popular if there had been no advertisements. It is the advertising revenue that makes newspapers thrive.
- Advertising need not necessarily lead to a monopoly. It is quite possible that new entrants with better and newer products have a better chance of acceptance by the consumers.

15.4 PERSONAL SELLING

In contrast to advertising and publicity, which use impersonal methods of communication, personal selling makes use of direct personal communications to influence the target customers. Personal selling is a highly distinctive method of promotion, and makes use of oral presentation in conversation with existing and potential customers, for the purpose of making a sale. Personal selling may be defined as the personal presentation by the firm's sales force for the purpose of making sales and building customer relationships.

15.4.1 Situations conducive for personal selling:

In certain marketing situations, personal selling provides an efficient solution to most of the selling problems. The following are the situations where the personal selling in a company will be more relevant.

Product situations:

- A product of a high unit value like photocopying machine, computers etc.
- A product is in the introductory state of its life cycle and requires creation of core demand
- A product requires personal attention to match specific consumer needs e.g. insurance policy
- A product requires demonstration, e.g. most of the industrial products
- A product requires after-sales service
- A product has no brand loyalty or very poor brand loyalty

Market situations:

- Company is selling to a small number of large-size buyers
- Company sells in a small-local market or in government or institutional market
- When desired middlemen are not available
- An indirect channel is used for selling to merchant-middlemen only.

Company Situations:

- When a company is not in a position to make use of suitable non-personal communication media
- When a company cannot afford to have a large budgetary outlay

Consumer behaviour

- Infrequent but valuable purchase
- When consumer wants instant answers to his questions

- Consumer requires persuasion and follow-up in face of competitive pressure.

15.5 SALES PROMOTION

Of all the methods of promotion that constitute the promotion mix, sales promotion is the only method that makes use of incentives to complete the push-pull promotional strategy of motivating the sales force, the dealer and consumer in transacting a sale. This may be defined as the short-term incentives to encourage the purchase of sale of a product or service.

15.5.1 Objectives of sales promotion

Some of the commonly attempted objectives are to;

- increase sales
- make the sale of slow-moving products faster
- stabilise a fluctuating sales pattern
- identify and attract new customers launch a new product quickly educate customers regarding product improvements
- reduce the perception of risk associated with the purchase of a product
- motivate dealers to stock and sell more (including complete product line)
- attract dealers to participate in manufacturer's dealer display and sales contests
- obtain more and better shelf space and displays
- bring more customers to dealer stores
- make goods move faster through dealers
- improve manufacturer-dealer relationship
- motivate salesforce to take the achievement higher than targets
- attract salesforce to give desired emphasis on new accounts, latent accounts, new products, and difficult territories
- reward salesforce for active market surveillance and for rendering superior customer service
- put power into the sales-presentation
- counter competitors' sales-promotion and marketing efforts
- provide punch to the company's advertising efforts

- build goodwill.

15.6 DIRECT MARKETING

It is the direct connection with carefully targeted individual consumers to both obtain an immediate response and cultivate lasting customer relationships.

15.6.1 Benefits of direct marketing

Direct marketing has become the fastest-growing form of marketing. It also continues to be more web-oriented. Both buyers and sellers have advantages of direct marketing.

Benefits to Buyers:

- It is convenient, easy and private. From the comfort of their homes or offices, they can browse catalogs or company websites at any time.
- It also gives access to comparative information about companies, products and competitors. Finally, it is interactive and immediate.

Benefits to Sellers:

- It is powerful tool for building customer relationships. Using database marketing, marketers can target small groups or individual customers and promote their offers.
- It is low cost, efficient and speedy.
- It provides greater flexibility. Marketer can adjust product's price and program.
- It gives sellers access to buyers that they could not reach through other channels.

15.6.2 Forms of direct marketing:

- **Direct mail marketing:** Direct marketing by sending an offer, announcement, reminder or other item to a person at a particular address. It is well suited to direct, one-to-one communication. It permits high market selectivity, can be personalise and flexible.
- **Catalog marketing:** Direct marketing through print, video, or electronic catalogs that are mailed to select customers, made available in stores or presented online.
- **Telephone marketing:** Using the telephone to sell directly to customers.
- **Direct response television marketing:** Direct marketing via television, including direct response television advertising and home shopping channels.

Lesson 16 Nature and Characteristics of Agribusiness

16.1 INTRODUCTION

Having discussed about the fundamentals of management and marketing in general, we will study application of these principles in agribusiness in following chapters. In this chapter, you are going to study the meaning of agribusiness, its dimensions, how it is different from other industries, its scope and structure of agribusiness.

16.2 MEANING OF AGRIBUSINESS

Several definitions of the term “agribusiness” exist in the literature. Encyclopedia Britannica defines agribusiness broadly as “agriculture operated by business; specifically, a part of a modern economy devoted to the production, processing and distribution of food, fibre products and by-products including the financial institutions that fund these activities” (Encyclopedia Britannica Inc., 2011)

Agro-industry refers to the establishment of linkages between enterprises and supply chains for developing, transforming and distributing specific inputs and products in the agriculture sector. Consequently, agro-industries are a subset of the agribusiness sector. Agribusiness and agro-industry both involve commercialization and value addition of agricultural and post-production enterprises, and the building of linkages among agricultural enterprises (FAO, 2007b). The terms agribusiness and agro-industries are often associated with large-scale farming enterprises or enterprises involved in large-scale food production, processing, distribution and quality control of agricultural products. Smaller agriculture-related entities (farms, processors, etc.) are less often thought of as agribusinesses or agro-industries, but strictly they should also be part of the definition, as considered in this report.

A simplistic definition states that agribusiness refers to any business related to agriculture, including farming, processing, exporting, input suppliers, trading and retailing (USAID, 2008). The term agribusiness is often used to convey an aggregate view of agriculture and business-related activities, covering the multiple functions and processes involved in modern food production and distribution. For the purposes of this study, agribusiness denotes the collective business activities that are performed from farm to table. It covers agricultural input suppliers, producers, agro-processors, distributors, traders, exporters, retailers and consumers.

Agri-business as a concept was born in Harvard University in 1957 with the publication of a book “A concept of Agri-business”, written by John David and A. Gold Berg. It was introduced in Philippines in early 1966, when the University of the Philippines offered an Agri-business

Management (ABM) programme at the under-graduate level. In 1969, the first Advanced Agribusiness Management seminar was held in Manila. While agribusiness once was not even a word, there are many agribusiness programs offered presently around the globe.

Goldberg and Davis defined the term ‘agribusiness’ as: “Agribusiness is a concept of economics which includes the sum total of all operations involved in the manufacturing and distribution of farm supplies; production operation on the farm; and the storage, processing and distribution of farm commodities and items made from them.”

Agri-business involves three sectors:

- 1. Input sector:** It deals with the supply of inputs required by the farmers for raising crops, livestock and other allied enterprises. These include seeds, fertilizers, chemicals, machinery and fuel.
- 2. Farm sector:** It aims at producing crops, livestock and other products.
- 3. Product sector:** It deals with various aspects like storage, processing and marketing the finished products so as to meet the dynamic needs of consumers.

Therefore, Agribusiness is sum total of all operations or activities involved in the business of production and marketing of farm supplies and farm products for achieving the targeted objectives.

16.3 DIMENSIONS OF AGRI-BUSINESS

1. It deals with different components of both agricultural and industrial sector, their interdependence and influence of one sector on other.
2. It deals with decision making process of farm either private or government in relation to production and selling aspects.
3. It deals with strengths and weaknesses of a project and thereby their viability in competing enterprises.
4. Agri-business is always market oriented.
5. Structure of Agri-business is generally vertical and it comprises the following
 1. Govt. policies and programmes regarding raising of crops or taking enterprises etc.,
 2. Research and extension programmes of the Govt.
 3. Farm supplies or inputs
 4. Agricultural production
 5. Processing
 6. Marketing of agricultural products

16.4 AGRIBUSINESS VIS-À-VIS OTHER INDUSTRIES

Management approach in any other industries differs with that of management in agribusiness. There are certain peculiarities of agribusiness which greatly distinguishes itself with the industries.

- 1. Agriculture is gamble with monsoon:** Nature of production in agriculture is such that it largely depends on weather conditions. Since agriculture deals with living beings which are prone to health hazards, the production becomes risky. As around 60 per cent

of the agricultural land in India is under rainfed farming, it heavily depends on timely rain therefore, the production becomes even uncertain. Thus agriculture is subjected to both higher risk and uncertainty which is not the case for other industries.

2. Small size of land holdings: Average area operated per holding in 2002-03 was 1.06 hectares compared to 1.34 hectares during 1991-92 and 1.67 hectares in 1981-82. (NSSO, 2002-03). The data reveals that due to division and fragmentation of land, the operating land holdings is decreasing over the years. This results into increase in number of marginal holdings. The data shows that, marginal holdings (of size 1 hectare or less) in 2002-03 constituted 70% of all operational holdings, small holdings (size 1 to 2 hectares) constituted 16%, semi-medium holdings (2 to 4 hectares), 9%, medium holdings (4 to 10 hectares), 4%, and large holdings (over 10 hectares), less than 1%. The share of marginal holdings in total operated area climbed by 6-7 percentage points since 1991-92 to reach 22-23%, drawing level with the shares of the semi-medium and medium holdings, which had the largest shares in 1991-92. Therefore, it is no wonder, agriculture in India is characterised by resource poor farmers.

3. Price fluctuations: Majority of agricultural products are seasonal while the demand for them is almost continuous. Consider for instance the perishable products like, tomato, potato, onion, milk etc, their production is seasonal while demand for them is continuous. This leads to lower prices during higher overall production and higher prices during lower production. Even for less perishable crops like wheat, maize, paddy etc. the prices will be lower during harvesting season and higher during sowing season. Therefore, the price fluctuations affect the decision of various agencies involved in agribusiness regarding when and where to sell or buy. This nature of large price fluctuation is seldom seen in other industries.

4. Bulkiness: Compared to most other products, agricultural products are bulkier. It affects the marketing functions concerned with physical handling as bulkiness requires large storage capacities. Products that occupy a lot of space in relation to their value are expensive to transport and store.

5. Perishable Products: Perishability influences the marketing of food products. The highly perishable products like fruits and vegetables must move to the consumer very quickly otherwise they completely lose their value. These product characteristics have their effect on the facilities necessary to market farm products. Perishable products require speedy handling and well-oiled cold chain infrastructure.

6. Grading and standardization: Another important characteristic of the agricultural products which hugely affects the marketing decisions is the lack of homogeneity unlike products of other industry. There exists large variation in size, shape, colour, flavor etc. of a single product. Consider any vegetables in surrounding market you will find the variation in above said characteristics. The quality of the agricultural products also varies from year to year and from season to season. Therefore, grading and standardization of agricultural products becomes increasingly difficult and costly.

7. Financing: As pointed out earlier, agriculture involves higher risk and uncertainty. This apart, this business largely handled by the resource poor farmers. Therefore,

financing in the farm sector is a problem. In India,

8. Irregular Supply of Agricultural Products: The supply of agricultural products is uncertain and irregular because of the dependence of agricultural production on natural conditions. With the varying supply, the demand remaining almost constant, the prices of agricultural products fluctuate substantially.

9. Processing: Most of the farm products have to be processed before their consumption by the ultimate consumers. This processing function increases the price spread of agricultural commodities. Processing firms enjoy the advantage of monopsony, oligopsony or duopsony in the market. This situation creates disincentives for the producers and may have an adverse effect on production in the next year.

10. Law of diminishing returns: It states that in all productive processes, adding more of one factor of production, while holding all others constant, will at some point yield lower per-unit returns. Unlike in other industries, law of diminishing returns sets early in agriculture. For example, the use of fertilizer improves crop production on farms and in gardens; but at some point, adding more and more fertilizer improves the yield less per unit of fertilizer, and excessive quantities can even reduce the yield.

11. Low elasticity of demand and supply: Farmers do not have control over their output to the same degree as in other industries. The nature of production is also such that the gestation period is too long. Therefore, it is not possible for farmers to adjust their production immediately according to the market signals. Even in case of demand also it is true. Most of the agricultural commodities come under necessary goods. Therefore, consumers will not reduce or increase their consumption significantly in response to the sale prices of agricultural commodities.

16.5 SCOPE OF AGRI-BUSINESS

1. Our daily requirements of food and fiber products at desired place at required form and time come from efficient and hard working of many business personnel in input, farm and food production and also in marketing them. The entire system in brief is called Agribusiness.
2. Agribusiness, of late, is combining the diverse commercial enterprises, using heterogeneous combination of labour, materials, capital and technology.
3. It is a dynamic sector and continuously meets current demands of consumers in domestic and world markets.
4. Agri-business establishment leads to strengthening of infrastructural facilities in that area, expansion of credit, raw materials supply agencies, adoption of modern technology in production and marketing of agricultural products.
5. Agri-business provides crucial forward and backward linkages. (**Backward linkage include supply of inputs, credit, production technologies, farm services etc., A forward linkage includes storage, processing, transportation and marketing aspects.**)
6. Agri-business generates potential employment opportunities.

7. It adds value to products and thereby increases the net profits.

16.6 STRUCTURE OF AGRI-BUSINESS

As mentioned earlier agri-business sector provides crucial backward and forward linkages. It involves two important sectors.

- **Farm input sector:** It deals with agro-based industries providing seeds, fertilizers, feed, chemicals etc. The industries supplying machinery or equipment, implements and petroleum etc are also important in this regard.
- **Farm product sector:** It deals with production and distribution of farm commodities. Large cooperative bodies also exist in Agri-business, but they are few in number, whereas small scaled agroindustries are large in number. The vertical integration of a farm is very common in poultry, fruit and vegetable farms.

Lesson- 17 Agro-based Industries in India

17.1 INTRODUCTION

Agribusiness denotes the collective business activities that are performed from farm to fork. It covers the supply of agricultural inputs, the production and transformation of agricultural products and their distribution to final consumers. Agribusiness is one of the main generators of employment and income worldwide.

Agribusiness is characterized by raw materials that are mostly perishable, variable in quality and not regularly available. The sector is subject to stringent regulatory controls on consumer safety, product quality and environmental protection. Traditional production and distribution methods are being replaced by more closely coordinated and better planned linkages between agribusiness firms, farmers, retailers and others in the supply chains.

17.2 IMPORTANCE

Establishment of agro-based industries is based on the availability of raw material.

- Agro-based industries have to set up at rural areas where raw material may be available in plenty – helps in the up-liftment of the rural economy.
- Provide rural population an opportunity for employment.
- Generate income and thereby improve economic condition of people – which in turn creates potential for demand based industries.
- Provide an opportunity for the dispersal of industries instead of concentrating at a particular place.
- Solve the problem of exploitation of farming community by traders and middlemen.
- Farmers could be assured of better price for their produce.
- Encourage to bring more and more areas under various crops – increase agricultural production and improve nation's economy.
- Transportation cost of agricultural products can be minimized – thereby help to minimize cost of finished goods.
- Avoid wastage of perishable agricultural products.
- Help to develop backward areas based on their suitability for setting up agro-industries.
- Prevent migration of people from rural to urban areas.

Industries are divided into four groups.

1. Resource based
2. Demand based
3. Skill based
4. Ancillary

Again the resource based industries are divided into agro-based, forest based, animal husbandry and poultry based, mineral based, marine based, etc. Agro-based industries are those industries which have either direct / indirect link with agriculture. Industries which are based on agricultural produce and industries which support agriculture come under agro-based industries.

17.3 TYPES OF AGRO-BASED INDUSTRIES

There are four types of agro-based industries.

1. Agro-produce processing units

They merely process the raw material so that it can be preserved and transported at cheaper cost. No new product is manufactured. Ex: Rice mills, Dal mills, etc.

2. Agro-produce manufacturing units

Manufacture entirely new products. Finished goods will be entirely different from its original raw material. Ex: Sugar factories, bakery, solvent extraction units, textile mills, etc.

3. Agro-inputs manufacturing units

Industrial units which produce goods either for mechanization of agriculture or for increasing productivity come under this type. Ex: Agricultural implements, seed industries, pumpset, fertilizer and pesticide units, etc.

4. Agro service centres

Agro service centres are workshops and service centres which are engaged in repairing and servicing of pumpsets, diesel engines, tractors and all types of farm equipment.

17.4 NEED FOR AGRO-BASED INDUSTRIES

- Suitable to rural areas as they are raw material oriented.
- For upliftment of rural economy.
- To solve the problem of unemployment.
- To generate income and increase standard of living.
- For decentralization and dispersal of industries.
- To reduce disparity between rural and urban areas.
- To encourage balanced growth between agriculture and industry.

- To solve the problem of exploitation of farming community.
- To reduce transportation costs.
- To give big push to agriculture and act as a source of demand and supply.
- To avoid wastage of perishable agricultural products.
- To prevent migration of rural people.
- To develop suitable backward areas.
- To improve infrastructural facilities.

17.5 INSTITUTIONAL ARRANGEMENTS FOR PROMOTION OF AGRO BASED INDUSTRIES

Following Ministries & Departments at the Centre and State level are at present looking after development of agro based industries.

1. **Ministry of Agriculture:** Deals with rice mills, oil mills, sugar mills, bakeries, cold storage, etc.
2. **Khadi and village industries board:** Covers traditional agro based industries like “gur”, handicrafts, khandasari, etc.
3. **Director General of Trade and Development:** Looks after the industries engaged in the manufacture of tractors, power tillers, diesel engines, pump sets, etc.
4. **Agro-industries Development Corporation:** In each state mainly supply agricultural machinery, inputs and agricultural advisory services to farmers. Some corporations have also undertaken certain manufacturing activities in agro-industries sector.
5. **Small Industry Development Organization:** Deals with small agro-industries like hosiery, processing of food products, beverages, food and fruit preservation, agricultural implements, pesticide formulations, etc.

17.7 CONSTRAINTS IN ESTABLISHING AGRO BASED INDUSTRIES

1. Proper guidance is not available to entrepreneurs.
2. It involves some element of risk taking
3. Change in crops / cropping pattern
4. Change in variety of crop due to technological improvement
5. Failure of monsoon may hit the raw material supply.
6. Proper guidance, training for modern and sophisticated agro-industries are not available.

7. As modern small industries are capital intensive, supply of finance will be a considerable problem.
8. Promotional activities such as conducting, intensive campaigns, identifying candidate industries and explaining to entrepreneurs about prospects are inadequate.
9. Uncertainty about future market demands.
10. Absence of information about quantity and quality of market.
11. Multiplicity of agricultural produce and absence of suitable methodology to select best suited industries to a given region.
12. Seasonal supply of agricultural produce may result in under utilization of capacity of the units as the unit will not be working throughout the year. Ex: Sugarcane
13. Industries based on fruits and vegetables may not get the same variety throughout the year, but they may get some other variety.
14. Absence of proper integration among the various agencies of development in the district.

References:

<http://mofpi.nic.in/ContentPage.aspx?CategoryId=796> as viewed on 15th May 16, 2012

Vijaya Kumari. R and Raghunatha Reddy G. Lecture notes, Acharya N.G. Ranga Agricultural University, visited on web site <http://www.angrau.ac.in/media/1639/AECO%20342.pdf> as on 20th may 2013

Suggested Readings:

Mukesh Pandey and Deepali Tewari. 2010. Agribusiness Book: A Marketing & Value-Chain Perspective: Analysing South Asia Textbook Student Edition. International Book Distributing Company

Raghunatha Reddy G and Visnushankar Rao. D. Practical manual. Agribusiness management. Dept of agricultural economics. Acharya N.G. Ranga Agricultural University. Agricultural college. Bapatla.

Lesson-18 Agricultural Supply Chain Management

18.1 INTRODUCTION

The term agribusiness is a generic one that refers to various businesses involved in food production. Businesses do not exist in isolation - every business has suppliers of goods it needs, and buyers of the goods it makes/sells - each having the same driving forces and critical responses. The grouping of these businesses is called a chain of companies and tends to reflect the industry the businesses are involved in. The agri-industry sector is a large, multifaceted industry sector that exists worldwide, and involves a range of businesses that create industry specific (e.g. grains, sugar cane, timber, dairy, cattle/meat, fruit and vegetables, cotton, wool, to name a few) agri-industry chains that often exist across international boundaries.

18.2 SUPPLY CHAINS

We speak of a 'supply chain' when different actors are linked from 'farm to fork' to achieve a more effective and consumer-oriented flow of products. Such supply chains may include growers, pickers, packers, processors, storage and transport facilitators, marketers, exporters, importers, distributors, wholesalers, and retailers. Supply chain development can thus benefit a broad spectrum of society, rural and urban, in developing countries. A supply chain can be broken into three major parts (components): upstream, internal, and downstream.

The upstream supply chain: The upstream part of the supply chain includes the activities of a company (a milk producer, in our case), with its first-tier suppliers and their connection to their suppliers (referred to as second-tier and third-tier suppliers). The supplier relationship can be extended several tiers, all the way to the origin of the material (e.g., mining ores, growing crops). In the upstream supply chain, the major activity is procurement.

The internal supply chain: The internal part of the supply chain includes all of the in-house processes used in transforming the inputs received from the suppliers into the organization's outputs. It extends from the time the inputs enter an organization to the time that the products go to distribution outside of the organization. The internal supply chain is mainly concerned with production management, manufacturing, and inventory control

The downstream supply chain: The downstream part of the supply chain includes all of the activities involved in delivering the products to the final customers. The downstream supply chain is directed at distribution, warehousing, transportation, and after-sale services.

Supply Chain Management: The function of supply chain management (SCM) is to plan, organize, and coordinate the activities along the supply chain. Today, the concept of SCM refers to a total systems approach to managing the entire supply chain.

18.3 THE SUPPLY CHAIN FLOWS

There are typically three types of flows in the supply chain: materials, information, and

There are typically three types of flows in the supply chain: materials, information, and financial (money). In managing the supply chain, it is necessary to coordinate all of the flows among all of the parties involved in the chain.

Material flows: These are all physical products, raw materials, supplies, and so forth, that flow along the chain. The concept of material flows also includes reverse flows—returned products, recycled products, and disposal of materials or products. A supply chain thus involves a product life cycle approach, from “dirt to dust.”

Information flows: This includes all data related to demand, shipments, orders, returns, schedules, and changes in the data. It also includes customer feedback, ideas from suppliers to manufacturers, order flows, credit flows, information to customers, and so forth.

Financial flows: The financial flows are all transfers of money, payments, credit card information and authorization, payment schedules, e-payments, and credit related data.

18.4 SUPPLY CHAIN MANAGEMENT AND ITS BENEFITS

Managing supply chains requires an integral approach in which chain partners jointly plan and control the flow of goods, information, technology and capital from ‘farm to fork’, meaning from the suppliers of raw materials to the final consumers and vice versa.

In order to react effectively and quick to consumer’s demand, supply chain management is consumer-oriented. It aims at coordination of production processes. Supply chain management results in lower transaction costs and increased margins. Because of the many activities and aspects involved it demands a multidisciplinary approach and sustainable trade relations. Supply chain partnerships are based on interdependence, trust, open communication and mutual benefits. The advantages of the supply chain management approach are numerous. Some important advantages are:

1. Reduction of product losses in transportation and storage.
2. Increasing of sales.
3. Dissemination of technology, advanced techniques, capital and knowledge among the chain partners.
4. Better information about the flow of products, markets and technologies.
5. Transparency of the supply chain.
6. Tracking & tracing to the source.
7. Better control of product safety and quality.
8. Large investments and risks are shared among partners in the chain.

18.5 SUPPLY CHAIN MANAGEMENT TOOLS

A range of new supply chain management tools have been developed over the past decade. ‘Efficient consumer response’ (ECR) has been developed to increase the consumer orientation and cost-effectiveness of supply chains. New management systems have been

implemented to improve logistics, increase the use of information and communications

implemented to improve logistics, increase the use of information and communications technologies and boost quality management (Lambert and Cooper, 2000). New generation cooperatives are emerging, strengthening the position of farmers' groups and strategic partnering and vertical alliances are cementing sustainable partnerships throughout the supply chain.

Food safety concerns have led to the development of 'integral chain-care' tools such as social accountability, good agricultural practice (GAP), total quality management, and HACCP (hazard analysis at critical control points). Implementation of such tools throughout a cross-border supply chain enables chain partners to ensure the quality and safety of their products and guarantees acceptable social chain performance. Supermarkets in Brazil and Thailand, for example, have initiated total quality management programs and HACCP rules for perishables like fresh fish and meat.

Retailers (e.g., Walmart, Carrefour, Royal Ahold, Tesco and Sainsbury) have increasingly established their own quality standards (e.g., EUREP-GAP and BRC2) which suppliers must meet. Tracking and tracing systems are used to certify the quality of products and ensure transparency in the flow of goods throughout the supply chain. Implementing such standards and systems impacts not only the organization of supply chains, but also financial aspects of chain cooperation. These standards and systems are now being used in the agricultural sector and have proven their value in cross-border projects. Sharpened requirements for standards have prompted public and private actors to establish a variety of initiatives to build or strengthen agri-supply chains.

18.6 VALUE CHAIN

The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use. The schematic diagram of value chain is presented in fig. 18.1.

A value chain links the steps a product takes from the farmer to the consumer. It includes research and development, input suppliers and finance. The farmer combines these resources with land, labour and capital to produce commodities. In the traditional selling system farmers produce commodities that are "pushed" into the marketplace. Farmers are isolated from the end-consumer and have little control over input costs or of the funds received for their goods. In a value chain marketing system, farmers are linked to consumers' needs, working closely with suppliers and processors to produce the specific goods consumers demand. Similarly, through flows of information and products, consumers are linked to the needs of farmers. Under this approach, and through continuous innovation, the returns to farmers can be increased and livelihoods enhanced. Rather than focusing profits on one or two links, players at all levels of the value chain can benefit. An integral component of the value chain is the agricultural supply chain, and in the literature these terms value chain and supply chain may at times be used interchangeably, or are at least closely related.

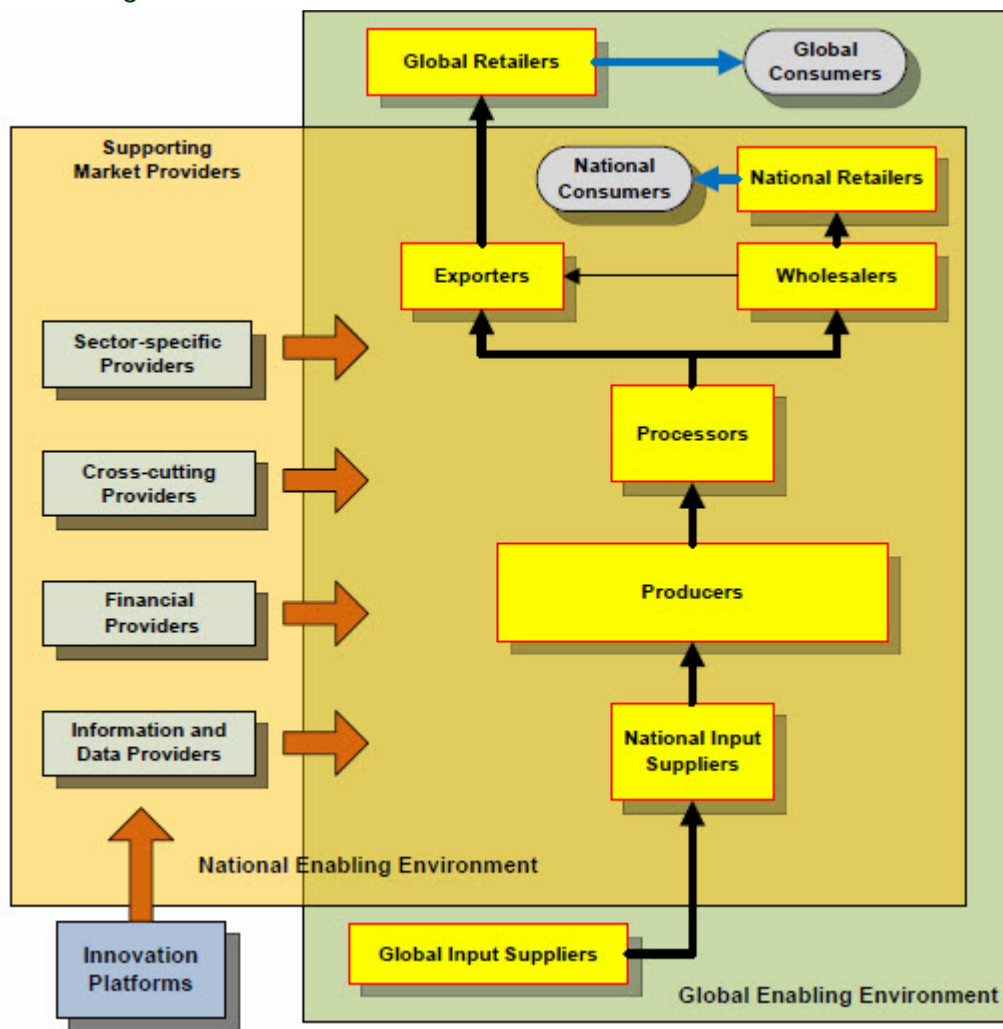


Fig. 18.1. An Overview of conceptual Value Chain

18.7 SIMILARITIES AND DIFFERENCES BETWEEN A SUPPLY CHAIN AND A VALUE CHAIN

Supply Chain Management (SCM) emerged in the 1980s as a new, integrative philosophy to manage the total flow of goods from suppliers to the ultimate user and evolved to consider a broad integration of business processes along the chain of supply. **Keith Oliver** coined the term “supply chain management” in 1982. Oliver, a vice president in Booz Allen Hamilton’s London office, developed an integrated inventory management process to balance trade-offs between his clients’ desired inventory and customer service goals. The original focus was the “management of a chain of supply as though it were a single entity, not a group of disparate functions,” with the primary objective of fixing the suboptimal deployment of inventory and capacity caused by conflicts between functional groups within the company.

SCM evolved quickly in the 1990s with the advent of rapid response initiatives in textile and grocery industries, and was refined by large retailer Wal-Mart who used point-of-sale data to enable continuous replenishment. Supply chain is a term “now commonly used internationally to encompass every effort involved in producing and delivering a final product or service, from the supplier’s supplier to the customer’s customer”. As the name implies, the primary focus in supply chains is on the costs and efficiencies of supply, and the

flow of materials from their various sources to their final destinations. Efficient supply

flow of materials from their various sources to their final destinations. Efficient supply chains reduce costs.

In common parlance, a supply chain and a value chain are complementary views of an extended enterprise with integrated business processes enabling the flows of products and services in one direction, and of value as represented by demand and cash flow in the other. Both chains overlay the same network of companies. Both are made up of companies that interact to provide goods and services. When we talk about supply chains, however, we usually talk about a downstream flow of goods and supplies from the source to the customer. Value flows the other way. The customer is the source of value, and value flows from the customer, in the form of demand, to the supplier. That flow of demand, sometimes referred to as a “demand chain” is manifested in the flows of orders and cash that parallel the flow of value, and flow in the opposite direction to the flow of supply. Thus, the primary difference between a supply chain and a value chain is a fundamental shift in focus from the supply base to the customer. Supply chains focus upstream on integrating supplier and producer processes, improving efficiency and reducing waste, while value chains focus downstream, on creating value in the eyes of the customer. This distinction is often lost in the language used in the business and research literature.

18.8 IMPORTANCE OF VALUE CHAIN

There are three main sets of reasons why value chain analysis is important in this era of rapid globalization. They are:

1. With the growing division of labour and the global dispersion of the production of components, systemic competitiveness has become increasingly important
2. Efficiency in production is only a necessary condition for successfully penetrating global markets
3. Entry into global markets which allows for sustained income growth – that is, making the best of globalization - requires an understanding of dynamic factors within the whole value chain

18.9 TRADITIONAL SELLING SYSTEMS V/S VALUE CHAIN MARKETING SYSTEM

In the traditional selling system, farmers produce commodities that are "pushed" into the marketplace. Farmers are generally isolated from a majority of end-consumer and have little control over input costs or process received for their goods. The primary exception is where local farmers sell produce in local markets and where there is a direct link from farmer to consumer. In most traditional selling systems farmers/producers tend to receive minimal profit. Any integration up or down the value chain can help.

Market “Push” tends to be based on independent transactions at each step, or between each node. Products may often be sold into a crowded and competitive market. The farmer is largely isolated from the consumer, and from the demands and preferences of consumers. Research and Development is focused on production and on reducing costs of production, and may not take account of other steps, links, or dependencies in the chain (e.g. environmental or social costs).

In a Value Chain marketing system, farmers are linked to the needs of consumers, working

Agribusiness Management and Trade

In a value chain marketing system, farmers are linked to the needs of consumers, working closely with suppliers and processors to produce the specific goods required by consumers. Using this approach, and through continuous innovation and feedback between different stages along the value chain, the farmer's market power and profitability can be enhanced. Rather than focusing profits on one or two links, players at all levels of the value chain can benefit. Well functioning value chains are said to be more efficient in bringing products to consumers and therefore all actors, including small-scale producers and poor consumers, should benefit from value chain development.

The market “Pull” is based on integrated transactions and information. Consumers purchase products that are produced according to their preferences. The farmer becomes the core link in producing the products that the consumers desire. Research and development, whilst including techniques targeted at increased production, is also focused on consumer needs, and attempts to take account of all of the links, and dependencies in the value chain, e.g. processing, environmental and social costs or considerations, as well factors such as health impacts, education and learning. Communication is in both directions. It is important that both consumers and processors are made aware of factors limiting production, just as much as farmers and other producers are made aware of consumer requirements (Fig. 18.2.1 & 18.2)

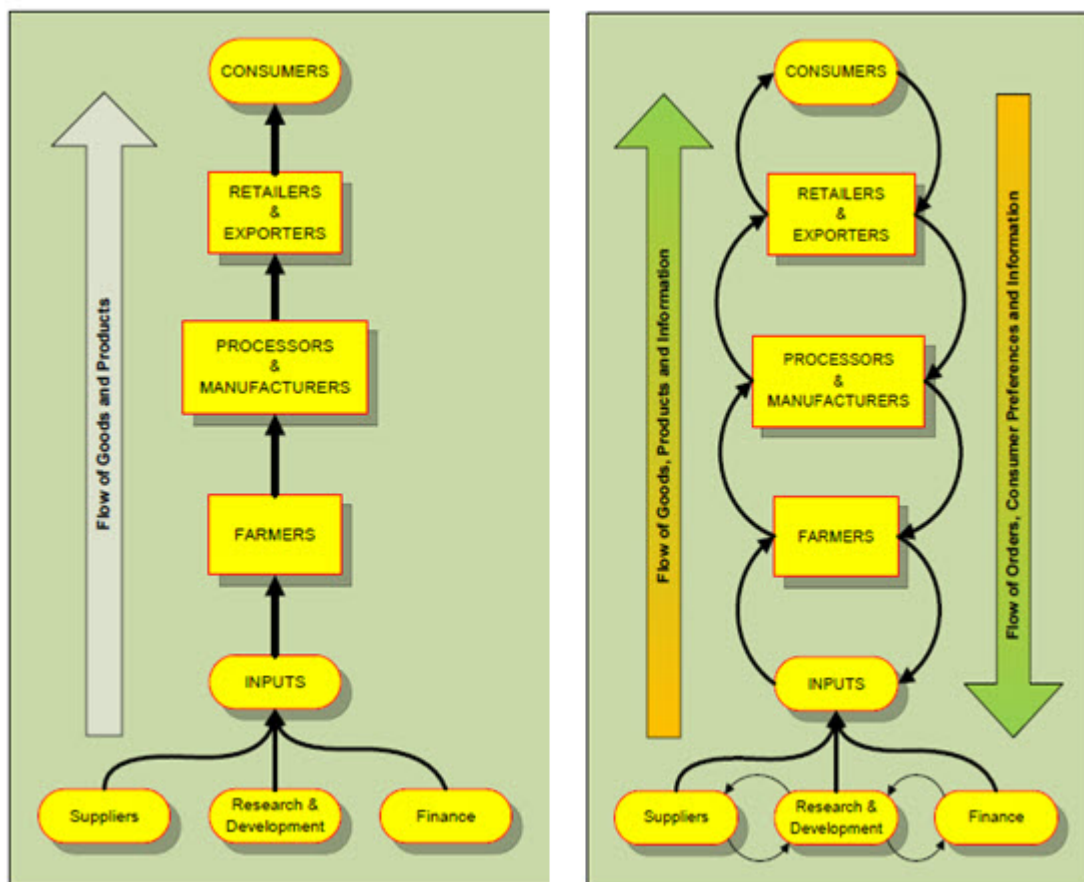


Fig18.2.1: Traditional Marketing System Fig.18.2.2: Value Chain Marketing System

INDIA'S AGRI SUPPLY CHAIN

Issues and Challenges:

1. Lack of Supply Chain Integration

Agribusiness Management and Trade

1. Lack of Supply Chain Integration

2. Sidelining Arhathias (middleman) from the value chain
3. Difficulty in credit recovery and reluctance of farmer in approaching banks
4. Low penetration of ‘one-stop-shops’(due to huge capital requirements)
5. Inefficient buy back system (purchase of farm output)
6. Inefficient compensation delivery system in case of product failure

Opportunities:

1. Government’s impetus to private extension services
2. One-stop-shop can act as facilitators of microfinance
3. New channel evolved can be used by FMCG and consumer durables

Suggested Reading:

1. Sunil Chopra & Peter Meindl. Supply Chain Management –PHI
2. R.P. Mohanty & S.G. Deshmukh. Essentials of Supply Chain Management. Jaico Publishing House
3. Altekhar. Supply Chain Management: Concept & Cases. PHI

Lesson-20 Strategic Management in Agribusiness**18.1 INTRODUCTION**

Strategic management is the set of managerial decision and action that determines the long-run performance of a corporation. It includes environmental scanning (both external and internal), strategy formulation (strategic or long range planning), strategy implementation, and evaluation and control. The study of strategic management therefore emphasizes the monitoring and evaluating of external opportunities and threats in lights of a corporation's strengths and weaknesses. Today's business news is filled with reports of organizations making changes in their strategies for whatever reasons. An underlying theme of discussing strategic management is that good strategies can lead to high organizational performance.

20.2 THE IMPORTANCE OF STRATEGIC MANAGEMENT

Strategic management is a process through which managers formulate and implement strategies geared to optimizing goal achievement, given available environmental and internal conditions. Strategic management is that set of managerial decisions and actions that determines the long-run performance of an organization. It entails all of the basic management functions—planning, organizing, leading, and controlling.

The strategic management process is made up of several components.

1. Strategy formulation is the part of the strategic management process that includes.
 - a. Identifying the mission and strategic goals.
 - b. Conducting competitive analysis
 - c. Developing specific strategies
2. Strategy implementation is the part of the strategic management process that focuses on.
 - a. Carrying strategic plans.
 - b. Maintaining control over how those plans are carried out.

20.3 ENVIRONMENTAL SCANNING AND INDUSTRY ANALYSIS

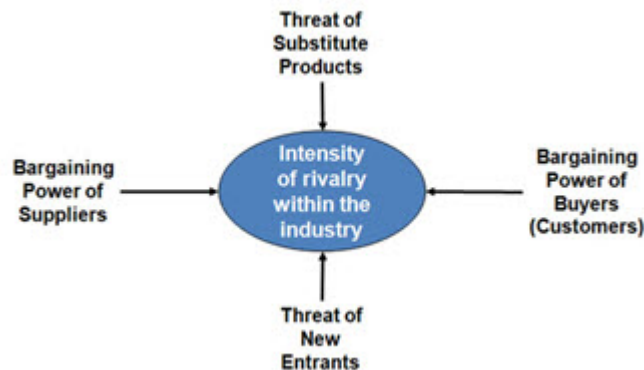
Environmental scanning is the monitoring, evaluating and disseminating of information from the external and internal environments to keep people within the corporation. It is a tool that a corporation uses to avoid strategic surprise and to ensure long-term health.

Scanning of external environmental variables: The external environment include general forces that do not directly touch on the short-run activities of the organization but those can,

and often do, influence its long-run decisions. These forces are economic forces, technological forces, political-legal forces and socio-cultural forces

20.4 MICHAEL PORTER'S APPROACH TO INDUSTRY ANALYSIS

Michael Porter, an authority on competitive strategy, contends that a corporation is most concerned with the intensity of competition within its industry. Basic competitive forces determine the intensity level. The stronger each of these forces is, the more companies are limited in their ability to raise prices and earned greater profits.



Threat of new entrants

New entrants are newcomers to an existing industry. They typically bring new capacity, a desire to gain market share and substantial resources. Therefore they are threats to an established corporation. Some of the possible barriers to entry are the following.

1. Economies of scale
2. Product differentiation
3. Capital requirements
4. Switching costs
5. Access to distribution channels
6. Cost disadvantages independent of size
7. Government policy

Rivalry among existing firms

Rivalry is the amount of direct competition in an industry. In most industries corporations are mutually dependent. A competitive move by one firm can be expected to have a noticeable effect on its competitors and thus make us retaliation or counter efforts. According to Porter, intense rivalry is related to the presence of the following factors.

1. Number of competitors
2. Rate of industry growth

3. Product or service characteristics
4. Amount of fixed costs
5. Capacity
6. Height of exit barriers
7. Diversity of rivals

Threat of substitute product or services

Substitute products are those products that appear to be different but can satisfy the same need as another product. According to Porter, “Substitute limit the potential returns of an industry by placing a ceiling on the prices firms in the industry can profitably charge.” To the extent that switching costs are low, substitutes may have a strong effect on the industry.

Bargaining power of buyers

Buyers affect the industry through their ability to force down prices, bargain for higher quality or more services, and play competitors against each other.

Bargaining power of supplier

Suppliers can affect the industry through their ability to raise prices or reduce the quality of purchased goods and services.

20.5 SWOT ANALYSIS

The SWOT analysis involves assessing organization strengths (S) and weaknesses (W), as well as environmental opportunities (O) and threats (T).

1. Strengths and weaknesses apply to internal characteristics.
 - a. A strength is an internal characteristic that has the potential of improving the organization's competitive situation.
 - b. A weakness is an internal characteristic that leaves the organization potentially vulnerable to strategic moves by competitors.
2. Opportunities and threats are found in the external environment.
 - a. An opportunity is an environmental condition that offers significant prospects for improving an organization's situation relative to competitors.
 - b. A threat is an environmental condition that offers significant prospects for undermining an organization's competitive situation.

20.6 PORTER'S GENERIC COMPETITIVE STRATEGIES

A firm's relative position within its industry determines whether a firm's profitability is above or below the industry average. The fundamental basis of above average profitability in the long run is sustainable competitive advantage. There are two basic types of competitive

advantage a firm can possess: low cost or differentiation. The two basic types of competitive advantage combined with the scope of activities for which a firm seeks to achieve them, lead to three generic strategies for achieving above average performance in an industry: cost leadership, differentiation, and focus. The focus strategy has two variants, cost focus and differentiation focus.

		Competitive Advantage	
		Lower Cost	Differentiation
Competitive Scope	Broad Target	1. Cost Leadership	2. Differentiation
	Narrow Target	3a. Cost Focus	3b. Differentiation Focus

1. Cost Leadership

In cost leadership, a firm sets out to become the low cost producer in its industry. The sources of cost advantage are varied and depend on the structure of the industry. They may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials and other factors. A low cost producer must find and exploit all sources of cost advantage. if a firm can achieve and sustain overall cost leadership, then it will be an above average performer in its industry, provided it can command prices at or near the industry average.

2. Differentiation

In a differentiation strategy a firm seeks to be unique in its industry along some dimensions that are widely valued by buyers. It selects one or more attributes that many buyers in an industry perceive as important, and uniquely positions itself to meet those needs. It is rewarded for its uniqueness with a premium price.

3. Focus

The generic strategy of focus rests on the choice of a narrow competitive scope within an industry. The focuser selects a segment or group of segments in the industry and tailors its strategy to serving them to the exclusion of others. The focus strategy has two variants.

- (a) In cost focus a firm seeks a cost advantage in its target segment, while in
- (b) Differentiation focus a firm seeks differentiation in its target segment. Both variants of the focus strategy rest on differences between a focuser's target segment and other segments in the industry. The target segments must either have buyers with unusual needs or else the production and delivery system that best serves the target segment must differ from that of other industry segments. Cost focus exploits

differences in cost behaviour in some segments, while differentiation focus exploits the special needs of buyers in certain segments.

20.7 LEVEL OF STRATEGIES

Many organizations develop strategies at three different levels. These three different and distinct levels of strategy are corporate, business, and functional: The corporate level strategy is discussed in detail below.

Corporate-level strategy is developed by top-level management and the board of directors. The corporate-level strategy seeks to determine what businesses a corporation should be in or wants to be in.

20.7.1 FORMULATING CORPORATE-LEVEL STRATEGY

A. A grand strategy (master strategy) provides the basic strategic direction at the corporate level of the organization. Four grand strategies have been identified.

1. Growth strategies are grand strategies that involve organizational expansion along some major dimension.

- a. Concentration focuses on effecting the growth of a single product or service or a small number of closely related products or services.

Ansoff Growth Matrix is very important strategy in business industry. Any company can measure how achieve their market in this strategy. It consists of four kinds of strategies depending on products and markets. There are

- a) Market penetration: existing products and existing markets
- b) Product development: new products and existing markets
- c) Market development: new markets and existing products
- d) Diversification: new markets and new products.

		Products	
		Present	New
Markets	Present	Market penetration	Product development
	New	Market development	Diversification

1) Market development is gaining a larger share of a current market or expanding into new ones.

2) Product development is improving a basic product or service or expanding into closely related products or services.

3) a. Horizontal integration is adding one or more business that is similar, usually by purchasing such business.

b. Vertical integration involves effecting growth through the production of inputs previously provided by suppliers or through the replacement of a customer role (Such as that of a distributor) by disposing of one's own outputs.

- 1) Backward integration occurs when a business grows by becoming its own supplier
- 2) Forward integration occurs when organizational growth encompasses a role previously fulfilled by a customer.
- 3) Diversification entails effecting growth through the development of new areas that are clearly distinct from current businesses.

i. Conglomerate diversification takes place when an organization diversifies into areas that are unrelated to its current business.

ii. Concentric diversification occurs when an organization diversifies into a related, but distinct, business.

These growth strategies can be implemented through a number of means:

- 1) Internal growth occurs as the organization expands by building on its own internal resources.
- 2) An acquisition is the purchase of all or part of one organization by another.
- 3) A merger is the combining of two or more companies into one organization.
- 4) A joint venture occurs when two or more organizations provide resources to support a given project or product offering.

2. A stability strategy is a second type of grand strategy that involves maintaining the status quo or growing in a methodical, but slow, manner.

a. Small, privately owned businesses are most likely to adopt this strategy.

b. Some of the reasons for adopting a stability strategy are that it

- 1) Avoids the risks or hassles of aggressive growth.
- 2) Provides the opportunity to recover after a period of accelerated growth.
- 3) Lets the company hold on to current market share.
- 4) May occur through default.

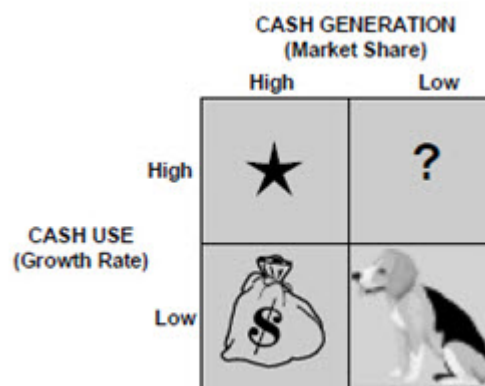
3. Defensive strategies, the third class of grand strategies, are sometimes called retrenchment strategies. They tend to focus on the desire or need to reduce organizational operations usually through cost reductions, such as cutting back on non-essential expenditures and instituting hiring freezes, and/or asset reductions such as selling land, equipment, or the business itself.

a. Harvest entails minimizing investments while attempting to maximize short-run profits and cash flow, with the long-run intention of existing with the market.

- b. A turnaround is designed to reverse a negative trend and restore the organization to appropriate levels of profitability.
- c. A divestiture involves an organization's selling or divesting of a business or part of a business.
- d. A bankruptcy is a means whereby an organization that is unable to pay its debts can seek court protection from creditors and from certain contract obligations while it attempts to regain financial stability.
- e. Liquidation entails selling or dissolving an entire organization.

B. A portfolio strategy approach is a method of analyzing an organization's mix of businesses in terms of both individual and collective contributions to strategic goals. Two portfolio approaches are used most frequently. Each uses a two-dimensional matrix, and each may apply to either the existing or to potential strategic business units (SBUs). The portfolio concept is analogous to an individual's selecting a portfolio of stocks to achieve balance in terms of risk, long-term growth, etc.

The **BCG Matrix** method is the most well-known **portfolio management tool**. It is based on product life cycle theory. It was developed in the early 70s by the Boston Consulting Group. The BCG Matrix can be used to determine what priorities should be given in the product portfolio of a business unit. To ensure long-term value creation, a company should have a portfolio of products that contains both high-growth products in need of cash inputs and low-growth products that generate a lot of cash. The Boston Consulting Group Matrix has 2 dimensions: **market share** and **market growth**. The basic idea behind it is: if a product has a bigger market share, or if the product's market grows faster, it is better for the company.



The categories are:

Cash cows are units with high market share in a slow-growing industry. These units typically generate cash in excess of the amount of cash needed to maintain the business. They are regarded as staid and boring, in a "mature" market, and every corporation would be thrilled to own as many as possible. They are to be "milked" continuously with as little investment as possible, since such investment would be wasted in an industry with low growth.

Dogs, more charitably called pets, are units with low market share in a mature, slow-growing industry. These units typically "break even", generating barely enough cash to maintain the business's market share. Though owning a break-even unit provides the social benefit of providing jobs and possible synergies that assist other business units, from an accounting point of view such a unit is worthless, not generating cash for the company. They depress a profitable company's return on assets ratio, used by many investors to judge how well a company is being managed. Dogs, it is thought, should be sold off.

Question marks (also known as problem children) are growing rapidly and thus consume large amounts of cash, but because they have low market shares they do not generate much cash. The result is a large net cash consumption. A question mark has the potential to gain market share and become a star, and eventually a cash cow when the market growth slows. If the question mark does not succeed in becoming the market leader, then after perhaps years of cash consumption it will degenerate into a dog when the market growth declines. Question marks must be analyzed carefully in order to determine whether they are worth the investment required to grow market share.

Stars are units with a high market share in a fast-growing industry. The hope is that stars become the next cash cows. Sustaining the business unit's market leadership may require extra cash, but this is worthwhile if that's what it takes for the unit to remain a leader. When growth slows, if they have been able to maintain their category leadership stars become cash cows, else they become dogs due to low relative market share.

Suggested Reading:

1. R. Srinivisan. Strategic Management, The Indian Context. PHI
2. Mason A. Carpenter, Prashant Salwan, Wm Gerard Sanders. Strategic Management, Concepts & Cases. Pearson Education

Lesson-21 Risk Management In Agribusiness**21.1 INTRODUCTION**

Agriculture production and farm incomes in India are frequently affected by natural disasters such as droughts, floods, cyclones, storms, landslides and earthquakes. Susceptibility of agriculture to these disasters is compounded by the outbreak of epidemics and man-made disasters such as fire, sale of spurious seeds, fertilizers and pesticides, price crashes etc. All these events severely affect farmers through loss in production and farm income, and they are beyond the control of the farmers. With the growing commercialization of agriculture, the magnitude of loss due to unfavorable eventualities is increasing. The question is how to protect farmers by minimizing such losses. Apart from production the risk is also involved in marketing of produces, because of high variation in prices. Therefore, farmers, traders, processors and other agencies involved in agribusiness use various risk management strategies. In this chapter you will understand the meaning of risk and uncertainty, dimensions of risks and management of the risk.

21.2 RISK AND UNCERTAINTY

Risk: It is a situation when all possible outcomes are known for a given management decision and probability associated with each possible outcome is also known. This is measurable through probability concepts. Ex: Occurrence of pest and disease, fluctuation in market prices etc.

Uncertainty: This situation prevails when all the possible outcomes of events are unknown, therefore neither the probability nor the outcomes are known. It is not measurable. Ex: Occurrence of flood, drought etc

In this chapter we are concerned about only risk in agribusiness, while uncertainty is beyond the scope of this course.

21.3 DIMENSIONS OF AGRICULTURAL RISKS

Farmers face a number of risks which are often interconnected. Five types of risk are generally considered in agriculture, according to their sources:

- **Production risks**, concerning variations in crop yields and livestock production, affected by a range of factors: weather conditions/climate change, pests, diseases, technological change as well as management of natural resources such as water
- **Market risks**, associated with variability in output price (mostly), also input price variability and integration in the food supply chain (with respect to quality, safety, new products, etc.)

- **Regulatory risks** connected with the impact of changes in agricultural policies (e.g. subsidies, regulations for food safety and environmental regulations) or trade policies: a change in government action, which is at odds with what farmers expected, may have a negative impact on their income
- **Financial risks** resulting from different methods of financing the farm business, subject to credit availability, interest and exchange rates, etc.
- **Human resource risks**, associated with unavailability of personnel.

Production risk, market risk and financial risks are usually considered the most important in agriculture and are discussed below. Policies are part of the solution in addressing these risks but are also associated with regulatory risks.

21.3.1 PRODUCTION RISKS OR TECHNICAL RISK

- In industrial business we have a technical input-output relationship with known quantity of output for a given quantity of input i.e., the production practices are standardized in industrial production. Such type of relationship does not exist in agricultural production.
- Output of crops and livestock is subject to change due to weather, diseases, insects, weeds and inadequate technology. These factors cannot be predicted accurately and hence results in the variability of the output.
- Thus, the production-risk is not confined to any one factor, but combination of different factors.
- However, weather risk and technical risk are the most important components of production risks.

21.3.2 MARKET AND PRICE RISK

Types of Market Risks: The risks associated with marketing are of three types, namely physical risk, price and institutional risk.

1. Physical risk includes loss of quantity and quality. It may be due to fire, rodents, pests, excessive moisture or temperature, careless handling, improper storage, looting or arson.
2. Price risk associates with fluctuation in price from year to year or within the year.
3. This is a change in any policies, or rules and regulation ruling the marketing aspects.

21.3.3 FINANCIAL RISK

- This type of risk increases with increased amount of borrowed money in the farm business

- Financing the production processes and storing the commodities under scientific management require large amounts of borrowed capital
- Hence a careful analysis is to be made considering all type of risks

21.4 MEASURES TO MANAGE PRODUCTION RISKS

There are various ways to manage or mitigate the production risks. The major measures are discussed below.

21.4.1 DIVERSIFICATION

This measure applies to those involved in production of primary agricultural produces, viz, farmers, cooperatives and corporate.

- Main objective of diversification is that if there is a loss in one enterprise, that would be compensated with the gain in other enterprise
- Selection of suitable crop and livestock enterprises is the first step in diversification
- The enterprise having less income variability should be selected
- Corporate companies involved in farming business may use risk programming models and game theory models to formulate whole farm plans under different risk situations

21.4.2 INSURANCE

Insurance is the coverage by contract in which one party agrees to indemnify or reimburse another for loss that occurs under the terms of the contract. Agricultural insurance is considered an important mechanism to effectively address the risk to output and income resulting from various natural and manmade events. Agricultural Insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise agricultural losses arising from named or all unforeseen perils beyond their control (AIC, 2008).

Agricultural insurance is one method by which farmers can stabilize farm income and investment and guard against disastrous effect of losses due to natural hazards or low market prices. Crop insurance not only stabilizes the farm income but also helps the farmers to initiate production activity after a bad agricultural year. It cushions the shock of crop losses by providing farmers with a minimum amount of protection. It spreads the crop losses over space and time and helps farmers make more investments in agriculture. It forms an important component of safety-net programmes as is being experienced in many developed countries like USA and Canada as well as in the European Union.

21.4.3 AGRONOMIC PRACTICES

To reduce production risk agronomic practices like, selecting suitable varieties, crop rotations, mulching etc., should be adopted.

21.5 MEASURES TO MANAGE MARKET RISKS

21.5.1 Physical Risk

- a. Reduction in Physical loss through fire proof storage, proper packing and better transportation.
- b. Transfer of physical losses to Insurance companies.

These measures are applicable to both farmers and other agencies in the business like processors also.

21.5.2 Price Risk

- Minimum Support Prices (MSP) is a vital tool in helping farmers and consumers in achieving food security while extending remunerative prices to the farmers for their produce.
- Dissemination of price information to all sections of society over space and time.
- Effective system of advertising and create a favorable atmosphere for the commodity.
- Creation of a Credit Risk Management Fund model for plantation crops seeks to institutionalize the credit risk of farmers in the event of adverse price movement of plantation crops is required.
- Operation of speculation and hedging : Futures trading, forward market

Speculation: Purchase or sale of a commodity at the present price with the object of sale or purchase at some future date at a favorable price.

Hedging: It is a trading technique of transferring the price risk. “Hedging is the practice of buying or selling futures to offset an equal and opposite position in the cash market and thus avoid the risk of uncertain changes in prices” (Hoffman).

Futures Trading: It is a device for protecting against the price fluctuations which normally arise in the course of the marketing of commodities. Stockists , processors or manufactures utilize the futures contracts to transfer the price risks faced by them.

- Contract farming is also one of the measure which safeguard both farmer and agribusiness firm against production and market risks
- It is a bipartite agreement between farmer and industry to supply the agreed quantity at a specified date. Services provided by sponsoring firms range from supply of inputs, extension service, quality monitoring to purchase of output. However the absence of common legally binding contractual arrangement gives the way for violation the contract on both sides.
- Production risk of farmer is minimized through the better technology and management practices provided by the processing company while the price risk of farmer is mitigated due to pre-agreed prices. Normally, processing company also faces the risk in the absence of contract farming due to non availability of timely

and quality raw material for processing. Through the contract farming system, this risk may also be minimized.

REFERENCES

Agriculture Insurance Company of India Ltd. (2008): www.aicofindia.org accessed 2006 to 2008.

Lesson-22 Contract Farming

22.1 INTRODUCTOIN

Farming is an age-old means of livelihood for millions of Indians. However, there have been few systems/models in which farmers are assured of a market for their produce, leave alone a remunerative price. Farmers have on occasion had to throw their produce away for want of buyers. This is one side of the coin. On the other is the agri-based and food industry, which requires timely and adequate inputs of good quality agricultural produce. This underlying paradox of the Indian agricultural scenario has given birth to the concept of Contract Farming, which promises to provide a proper linkage between the 'farm and market'.

22.2 MEANING AND FEATURES OF CONTRACT FARMING

Meaning: Contract farming is defined as a system for the production and supply of agricultural/horticultural produce under forward contracts between producers/suppliers and buyers. The essence of such an arrangement is the commitment of the producer/ seller to provide an agricultural commodity of a certain type, quality, at a time and a price, and in the quantity required by a known and committed buyer.

Some authors trace the principles of contract farming back to the 19th century, when the mechanism was used in the United States for processing crops such as sugar beets and peaches, and in Taiwan, for sugar production under the Japanese colonial rule. Its use later expanded into many food and fiber sectors.

22.3 SALIENT FEATURES OF CONTRACT FARMING:

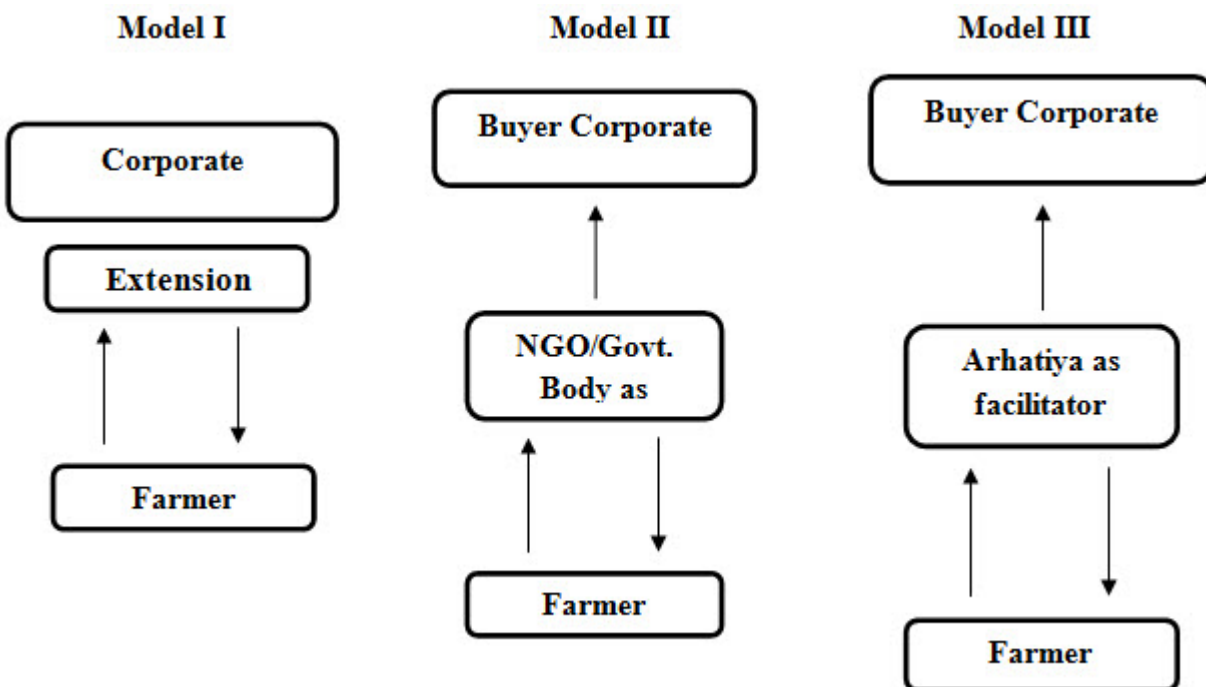
- The industry or the prospective buyer enters into a contract with the farmer
- The industry promises to buy the farmer's produce
- The farmer harvests and delivers to the contractor, a quantum of produce, based upon anticipated yield and contracted acreage
- Price and other terms and conditions are pre-negotiated between the farmer and the buyer. The buyer supplies the required farm inputs at the required time. Sponsors may also provide land preparation, field cultivation and harvesting as well as free training and extension. This is primary to ensure that proper crop husbandry practices are followed in order to achieve projected yields and required qualities
- Farmers will not cultivate and diversity into new crops unless they know they can sell their crop, and traders or processors will not invest in ventures unless they are assumed that the required commodities can be consistently produced. Contract farming offers a potential solution to this situation by providing market guarantees to the farmers and assuring supply to the purchases.
- Contract farming usually allows farmers access to some form of credit to finance

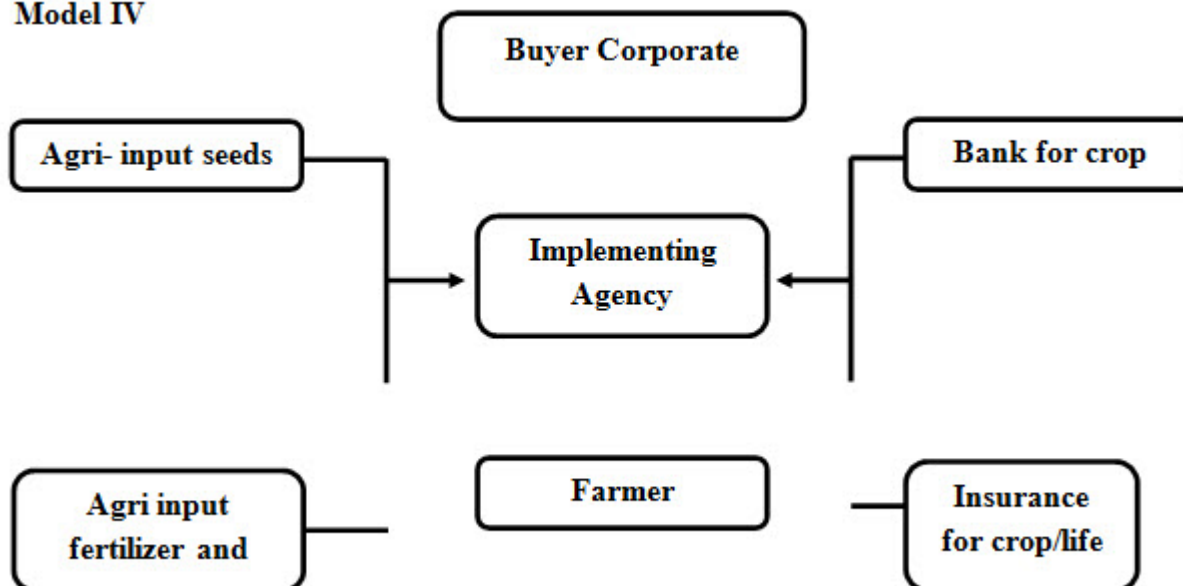
- Contract farming usually allows farmers access to some form of credit to finance production inputs. In most cases it is the sponsors who advance credit through their managers. However loans that are guaranteed by the sponsor, i.e. the contract serve as collateral. The tendency of certain farmers to abuse credit arrangements by selling crops to buyers other than the sponsor (extra-contractual marketing), or by diverting inputs supplied by management to other purposes, has caused some sponsors to reconsider supplying most inputs, opting instead to provide only seeds and essential agrochemicals.

22.4 MODELS IN CONTRACT FARMING

Contract farming can be structured in a variety of ways depending on the crop, the objectives and resources of the sponsor and the experience of the farmers. Contracting out production is a commercial decision to facilitate an adequate supply within a designated period and at an economic price. Any crop or livestock product can theoretically be contracted out using any of the models; however, certain products favour specific approaches. The most popular contract farming models are schematically presented below (Fig. 22.1). The features of each model is given in table 22.1 and the list of companies operation in different modes is given in table 22.2.

Fig. 22.1. Models in contract farming



Model IV

Note: For model agreement for contract farming scheme in Gujarat, you can follow the link http://agri.gujarat.gov.in/boards_corporations/gs-agri-mark-board/schemes/contract-farming/model-agreement.htm

Table 22.1 Comparison of Contract Farming Models in India

Component	Model I	Model II	Model III	Model IV
Cost increments due to channel partners	Nil	Minimal	Considerable	Maximum
Scale of operations	Can be taken up with smaller scale of operations	Can be taken up with smaller scale of operations	Applicable for large scale of operations	Applicable for large scale of operations
Channel Partners	No channel partners	Non profit organizations as partners	Traditional channel members as partners	Corporates act as channel partners
Transparency	Completely	Transparent	Low	Lower

Transparency in price fixation	Completely Transparent	Transparent	Low transparency	Low Transparency
Services offered to the farmer	Only extension services other services subjective to the operating company	Extension services and other services at the discretion of the contracting firm	Extension services and other associated services such as loans and other inputs	Wide range of services ranging from the crop loan to life insurance are taken care

Source: NIAM

Table 22.2: Grouping of major contract farming initiatives of corporates under different models

Type	Initiative	Crop	State
Type I	Nijjer Agro	Tomato & Chilly	Punjab
	Tinna Oils	Soyabean	Maharashtra
	SNC Oil	Dhavana	Karnataka
	AVT Natural Products Ltd	Marigold	Karnataka
	Natural Remedies Pvt Ltd	Coleus	Karnataka
	Himalaya Drugs Pvt Ltd	Ashwagandha	Karnataka
	PepsiCo	Basmati	Punjab
Type II	Ion Exchange Enviro Farms	Organic Produce	Maharashtra
Type III	United Breweries Ltd	Barley	Punjab
	ITC-IBD	Soyabean, Wheat	Madhya Pradesh
Type IV	MSSL	Basmati, Non-Basmati, Maize	Punjab, Tamil Nadu

	Escorts Machinery Group Super Spinning Mills	Cotton	Punjab
	Cargill India Pvt Ltd	Soyabean, Wheat, Maize	Tamil Nadu
	Appachi Cotton India	Cotton	Madhya Pradesh
	Gherkin Exporters	Gherkin	& Uttar Pradesh
			Tamil Nadu
			Karnataka, Tamil Nadu, Andhra Pradesh

22.5 ADVANTAGES AND DISADVANTAGES OF CONTRACT FARMING

We turn now to examine the potential advantages and disadvantages of this mode of governance for the actors involved in the transactions.

A useful instrument for public policy design is offered by stakeholder analysis, which among other things tries to identify who stands to win or lose from a policy choice and assess what is the extent of their potential gains and losses.

22.5.1 FOR FARMERS

Advantages

Farmers find in contract farming a means to manage risks in production and marketing because of the following reasons:

- Inputs can be provided by agribusiness firms, thereby reducing the uncertainties associated with input availability, quality and costs. Input quality and adequacy to the crop or livestock activity contracted is ensured and translated into higher productivity and higher returns.
- Services, such as mechanization and transportation, can be provided by agribusiness firms.
- Technological assistance can be offered by the contracting firm, favoring the production of higher valued, often riskier crops and livestock.
- A related benefit is the facilitation of the conversion path from subsistence to commercial farming.

• A market outlet is secured for the contracted production, such that the uncertainty

Agribusiness Management and Trade

- A market outlet is secured for the contracted production, such that the uncertainty and the transaction costs involved in the search for markets are reduced. Small-scale farmers in particular benefit from the reduction of marketing risks, as they often have more limited market access
- The uncertainty about sales price is often reduced, since contracts typically specify at the beginning of the growing cycle the prices to be paid at product delivery.
- Access to credit is enhanced. Under a resource provision contract, working capital credit is typically supplied in kind, via input provision, by the contracting firm.
- Contract farming can open up new markets, which would otherwise be unavailable to small farmers.
- With a buyer in sight, the reliance of farmers on middlemen is almost eliminated
- The farmers acquire lot of new skills, both technical and managerial, through Contract farming. He learns record keeping, efficient use of farm resources, improved methods of applying chemicals and fertilizers, appreciation of the importance of quality and the characteristics and demands of export markets.

Disadvantages

- Even though farming risks can be reduced by contracting, the contracts themselves represent a risk source in the farm operation, thus leading to potential disadvantages for farmers. As we will see, most of these negative aspects come. The potential disadvantages are:
- Firms might renege on contractual terms if market circumstances change or if other conditions for opportunistic behavior arise. In the absence of effective enforcement mechanisms, there is little that a farmer can do to avoid the negative impact of contractual hold-ups.
- The dependency on a prescribed technology package makes farmers vulnerable to output and productivity manipulation by agribusiness firms.
- Delivery schedules might be set by firms so as to influence prices paid to farmers.
- Firms might intentionally avoid transparency in the price determination mechanism of the contract, utilizing complex formulas or quantity and quality measurements not well understood by farmers. For example, formula prices related to quality attributes such as fat content, somatic cell counts, sucrose content, bacterial counts and other criteria that require laboratory measurement lend themselves to fraud and manipulation.
- Farmers lose flexibility in enterprise choice.
- Long term contracts might lead to gradually decreasing real prices received by farmers.
- Farmers may lose linkages with former transaction partners.
- Farmers may abandon traditional cultivation methods and products

- Farmers may abandon traditional cultivation methods and products.
- The risks that are normally associated with monoculture practices are increased.
- The risk of indebtedness grows

22.5.2 FOR AGRIBUSINESS FIRMS

Advantages

The theoretical hypothesis is that agribusiness firms find in contract farming a strategy to minimize transaction costs, primarily the ones related to asset specificity and uncertainty. The main potential advantages are as follows:

- Greater regularity of agricultural product supplies to the firm is ensured.
- Greater conformity to desirable product quality attributes and to safety standards is promoted.
- Access to land is facilitated.
- Input costs per unit are reduced due to economies of scale.
- Access to agricultural credit and eventual financial incentives and subsidies is facilitated.
- Labour costs are reduced.
- Expansion and contraction of production is facilitated. Without fixed assets in land or specialized housing for animals, for instance, agribusiness firms have greater flexibility to expand or reduce operations.
- Contract farming offers access to crop production from land that would not otherwise be available to a company, with the additional advantage that it does not have to purchase it. Scarce resources of the company can then be put to better use.
- For high value, labour intensive agricultural enterprises, managerial efficiency in farming may be favoured.

Disadvantages

As for farmers, agribusiness firms incorporate new risk sources in their operations, when opting for contractual arrangements as a governance mode in their supply chains. These risks bring disadvantages for the use of contracts. Classic disadvantages are:

- Risk of contractual hold-ups. Just as a firm may be prone to renege on contractual terms when market conditions change, a farmer may be compelled to sell all, or part of his or her production, to a third party, when prices are perceived to be higher outside the contractual bond.
- Transaction costs of dealing with large numbers of farmers are high.
- Risk of misuse or deviation of supplied inputs and of final products.
- Loss of flexibility to seek alternative supply sources

- LOSS OF FLEXIBILITY TO SEEK ALTERNATIVE SUPPLY SOURCES.

22.5.3 ADVANTAGES TO GOVERNMENT

The government has been trying hard so far, to promote private sector participation in providing extension services by involving the corporate sector either through contract farming or cooperative farming. It will help the government in solving problems of food sufficiency, increasing disposable income of small farmers in particular, increasing funds availability to farmers enabling them to use better farm inputs and will lead to adoption of latest agricultural technologies because of effective percolation due to services provided by private sector industry. This will lead to overall growth and development of Indian farming community.

In brief, there are potential costs and benefits and there are less tangible rewards and shortcomings in contract farming, for all partners involved in it. The recent resurgence of contracting in agri-food systems suggests that the balance has been favourable to the participants. Successful contracting, nonetheless, demands some pre-conditions to be in place and these are reviewed in the next section.

Lesson-23 ICT In Agribusiness**23.1 INTRODUCTION**

Agricultural extension and farmer-outreach programs face some of the challenges like, cost effective outreach, tailor made solutions to needs of individual farmers in the local language, timely and adequate information, provision of entire information at one place right from cultivation to processing to marketing etc. Large section of the farming community does not have access to the huge knowledge base acquired by agricultural universities, extension – centers, businesses. However, internet and mobile networks have the potential to provide agro-information services that are, affordable, relevant, and searchable and up to date. All stakeholders of agriculture industry need accurate, complete and timely information in user-friendly form to manage each of these phases efficiently. Information and Communication Technology (ICT) can play a significant role here. ICT in agriculture is an emerging field focusing on the enhancement of agricultural and rural development in India. It involves application of innovative ways to use ICT in the rural domain. It can provide with accurate information necessary for the farmers which facilitates better agricultural output. This chapter covers the meaning of ICT, its application in agribusiness and challenges in its application.

23.2 WHAT IS ICT

One definition of ICT is: an umbrella term that includes any communication device or application, encompassing: radio, television, mobile phones, computers and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video-conferencing and distance learning. (Lewis, 2009)

ICT is simply an electronic means of capturing, processing, storing and disseminating information (Duncombe & Heeks)

There are mainly three components of ICT viz, computer technology, communication technology, and information management technology.

23.3 BENEFITS OF ICT APPLICATION IN INDUSTRY

Some of the benefits of ICT for the improvement and strengthening of agricultural sector in India include;

- Timely information on weather forecasts and calamities
- Better and spontaneous agricultural practices
- Better marketing exposure and pricing
- Reduction of agricultural risks and enhanced incomes

- Better awareness and information
- Improved networking and communication
- Facility of online trading and e-commerce
- Better representation at various forum, authorities and platform, etc

23.4 APPLICATION OF ICT IN AGRIBUSINESS

This section provides examples of three types of ICT solution, categorized in terms of the end result for the consumer: ICT for production systems management, ICT for market access services, and ICT for financial inclusion.

23.4.1 ICT FOR PRODUCTION SYSTEMS MANAGEMENT

Information services provide data that are tied to helping farmers improve their productivity, yields and profitability during the course of their normal business of growing agricultural produce. They are broken down into sub-categories of information services that involve short-term and long-term productivity enhancements; those that minimize the negative effects of crisis events, and those that improve field-based risk management, for example, by guiding the implementation of crop rotation to preserve the soil in the long term.

Short-term productivity: Typically, information such as weather updates is readily available at low or no cost (often subsidized by the local government). However, farmers do not have access to these data, or at least not timely access. Short-term productivity and crisis management information services attempt to fill this void, and are typically the easiest and most commonly offered by service providers. Short-term productivity and crisis management services are often offered conjointly, with significant overlap. An example of short-term productivity services is the e-Dairy project in Sri Lanka in which milk yields were improved by informing dairy farmers about the most opportune times for artificial insemination.

Crisis management: Crisis management information services essentially help prevent losses (rather than raising productivity). Often these services serve as an alert system enabling farmers to react quickly before an oncoming event (often weather- or disease-based). For example, the Radio and Internet for the Communication of Hydro-Meteorological Information (RANET) project in Kenya uses FrontlineSMS technology to collect weather data from local farmers and push out warnings to them of potential weather-related risks. In India one of the example is mKRISHI of TATA group.

Long-term productivity: Long-term productivity enhancements and risk management ICT services can have a more significant impact on customers' livelihoods, through higher income or lower risk of loss. As with shorter-term services, long-term productivity and risk management services are often offered together and overlap. Long-term productivity information services cover topics that take longer to learn and are often offered with other technologies and channels, such as face-to-face training or extension agent support. Benefits from such services are generally realized at a much later date. Many such services are delivered in conjunction with in-person and

continuing training, extension services, demonstrations and field visits. These services are typically education-focused, often with a distance learning aspect, and serve as a way to monitor the progress of beneficiaries.

Risk management: Risk management information services are also long-term in scope, but as with crisis management, they help farmers avoid losses rather than increasing productivity. These types of service differ from crisis management services in that they take a longer time to absorb and implement, and the benefits are realized much later than are those of crisis management. For example, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India created its Virtual Academy to train local women through Internet-based video conferences so they could act as extension agents and help women farmers change their cultivation and harvesting techniques to reduce long-term risks. In one case, the Virtual Academy taught women farmers how to experiment with drought-resistant crops.

23.4.2 ICT FOR MARKET ACCESS

Market access ICT services comprise any service that provides beneficiaries, especially farmers, with access to information on pricing of agricultural products (inputs and outputs) and on finding and connecting to suppliers, buyers or logistics providers, such as storage facilities and transport companies. Such services include simple pricing services, virtual trading floors (matching services or full commodity exchanges) and holistic trading services. Market access services also cover ICT solutions that help the typically larger upstream and downstream firms, such as processors or exporters, to manage their operations and the quality of their produce better – here called downstream administration.

Pricing: The most common ICT intervention for the agricultural value chain is a pricing service in which commodity price information is pushed out to customers on a regular basis. These data are often national or regional in scope, and so may not be entirely relevant for the farmer in the field, depending on his/her proximity to markets. Users (mainly farmers) generally have little interaction with providers, and must digest the information to find and negotiate with buyers. This type of service simply replaces (or enhances) services that are often provided through print, radio or television. The most common advantages to such services are price transparency and improved negotiating leverage for the often disempowered seller (farmer). For example, the Northwest Agricultural Marketing Association (NAMA) in Cambodia provides farmers with timely pricing data on agricultural produce such as maize, soybeans and cassava and on agricultural inputs such as seed and fertilizer.

Virtual trading floors: Virtual trading floors (VTFs) are electronic market places where buyers and sellers connect through an electronic network (as opposed to pricing services, which mostly only provide static information). The important difference between VTFs and more traditional trading floors is that the buyers and sellers on a VTF do not have to be physically in the same location to make an exchange. There are two basic kinds of VTF: matching services, and commodity exchanges.

Holistic trading services: Holistic trading services essentially provide the same services as pricing information services and VTFs, with additional assistance beyond the simple transactions of purchasing and buying agricultural products. Such assistance can include weather information, technical information on agricultural practices, and long-term education. These holistic service packages can not only link suppliers and buyers but can also connect parties for logistics, transportation, processing and storage needs. Often, holistic trading providers also offer access to financial services (payments, credit, etc.). For example, e-Choupal in India reduces transaction costs by connecting buyers – primarily e-Choupal’s parent ITC Ltd – with farmers, using Internet kiosks to procure agricultural and aquaculture products such as soybeans, wheat, coffee and prawns. Through its ICT-kiosk platform, e-Choupal also offers farmers many other value chain development services, such as sharing of best practices to improve productivity, and price benchmarking to increase sales prices.

23.4.3 ICT FOR FINANCIAL INCLUSION

The primary types of financial services offered through ICT solutions for value chains are transfers and payments, credit, savings, insurance and financial derivatives. ICT can help improve rural communities’ access primarily by convincing financial institutions to enter potential rural markets through unconventional methods.

Transfers and payments: In recent years, money transfers through ICT solutions, notably through mobile phones, have become a much-discussed solution. This service is typically called direct or person-to-person (P2P) service. These types of solution are often offered by mobile network operators (MNOs) rather than banks, as they provide a simple cash transfer service, similar to that of Western Union. It is difficult to talk about such solutions without mentioning the highly successful M-PESA in Kenya, which enables urban Kenyans to send money home easily to their families in rural areas. Many providers in Kenya and throughout the world want to replicate M-PESA’s success. Ideally, this new way of transferring money reduces costs, improves efficiency and, most important, reduces graft and waste.

Credit: Large credit programmes through governments have often failed, but in recent decades there has been a significant increase in access to private credit providers, such as input suppliers, lead buyer firms, speciality lenders, microfinance institutions and banks, which all require at least sustainability if not profitability. This trend has encouraged a search for higher efficiency, improved (credit) risk monitoring, and better delivery to farmer and institutional customers – ICT has played a significant part in achieving all three of these aims. For example, DrumNet in Kenya helped link financial institutions, smallholder farmers, retail providers and agricultural product buyers through a cashless microcredit programme. Farmers obtained access to inputs (e.g., seeds, fertilizers, pesticides) at local input providers by using a pre-established line of credit from banks, with collateral from the fixed-purchase-price contracts of a large buyer. DrumNet provided the bank with a credit rating score for each farmer, based on whether or not the farmer had paid her/his loans and delivered the promised agricultural product on time. The farmers benefited from increased access to financial services without the need to visit a distant branch or undergo an extended underwriting and disbursement process.

Savings: More compelling solutions may be found in other financial services, such as savings and insurance, both of which are often ignored in the preference for credit. The rural poor need financial services that are convenient, flexible and secure, especially for their own money, i.e., savings. The most common ways for rural farmers to save are informal, such as in kind and through savings groups, and generally meet the first two criteria – convenience and flexibility – very well. However, the third point, security, is a major constraint of informal mechanisms: money guards may run away with the money; in-kind savings such as stored rice may spoil or diminish in value; and money left under the mattress may be lost in a house fire. By either making informal methods more secure or improving formal financial institutions' convenience and flexibility, ICT can help solve the savings puzzle for rural farmers. For example, the Cooperative for Assistance and Relief Everywhere (CARE) in East Africa is experimenting with connecting its village savings and loan associations (VSLAs) to the formal banking system.

Insurance: ICT can be a significant contributor to improvements in the adoption and administration of insurance, as policy renewals are historically very poor (potential solution: short message service [SMS] reminders), trust between customers and insurance companies is generally low (potential solution: improved claim processing times), and the level of data for appropriate pricing of policies and monitoring of potential risk events is inadequate (potential solution: put in place remote rainfall sensors connected to a database via a satellite connection).

23.5 CHALLENGES FOR ICT APPLICATION IN INDIA

Most important constraints faced in India for ICT application are; shortage of telephone lines, operating costs, band width, connectivity problems, Internet Service Provider, Power problems, computer literacy etc.

23.6 ICT INITIATIVES FOR AGRICULTURAL DEVELOPMENT IN INDIA

- Following are the some of the ICT initiative for agricultural development in India.
- Gyandoot project (Madhya Pradesh);
- Warana Wired Village project (Maharashtra);
- Information Village project of the M S Swaminathan Research Foundation (MSSRF) (Pondicherry);
- iKisan project of the Nagarjuna group of companies (Andhra Pradesh);
- Automated Milk Collection Centres of Amul dairy cooperatives (Gujarat);
- Land Record Computerisation (Bhoomi) (Karnataka);
- Computer-Aided Online Registration Department (Andhra Pradesh);
- Online Marketing and CAD in Northern Karnataka (Karnataka);
- Knowledge Network for Grass Root Innovations – Society for Research and Initiatives (SRISTI) (Gujarat)

- Application of Satellite Communication for Training Field Extension Workers in Rural Areas (Indian Space Research Organisation);
- In addition to the above, a few non-governmental organisations (NGOs) have initiated ICT projects such as:
- Tarahaat.com by Development Alternatives (Uttar Pradesh and Punjab);
- Mahitiz-samuha (Karnataka);
- VOICES – Madhyam Communications (Karnataka);
- Centre for Alternative Agriculture Media (CAAM);

Some exclusive agricultural portals are also available, such as:

Haritgyan.com; Krishiworld.net; TOEHOLDINDIA.com; Agriwatch.com; ITC's Soyachoupal.com; Acquachoupal.com; Plantersnet.com, kisanschool.org, etc

REFERENCES

Mukesh Pandey and Deepali Tewari. 2010. Agribusiness Book: A Marketing & Value-Chain Perspective: Analysing South Asia Textbook Student Edition. International Book Distributing Company

Anwesha Banerjee. 2011. The ICT in Agriculture: Bridging Bharat with India. Global Media Journal – Indian Edition/ISSN 2249-5835. Winter Issue / December 2011. Vol. 2/No.2. PP. 1-16.

Lesson-24 Agricultural Production Scenario in India

24.1 INTRODUCTION

Having learnt the principles of management, concepts of agribusiness, application of management principles to agriculture, we now focus on the production, consumption, processing and marketing of agricultural products in this module. In this lesson you are going to study the production status of major agricultural and livestock products in India.

24.2 BROAD CLASSIFICATION OF AGRICULTURAL PRODUCTS

Agricultural products may be categorized in to two broad groups viz crop and livestock products. For the better understanding the subject, these can be further classified as under.

1. Food Crops – plants grown primarily for the harvesting of any part which is used by man as food or processed into food product. This classification is a collective term for crops which are variously sub-classified into smaller groups such as cereals, root and tuber crops, legume seed crops, sugar crops, beverage crops, fruit crops and vegetables.

2. Non-food Crops- plants grown for the production of non-food products such as fiber, fodder, alcohol, tobacco, industrial oil, rubber, gums and resins, drugs, etc. or for ornamentation. Included in this classification are fiber crops, pasture and forage crops, rubber crops, latex and gum crops, dye and tannin crops, biofuel crops, essential-oil crops, biocidal crops and most industrial crops.

24.3 AREA UNDER MAJOR CROPS

As seen from the table 24.1 since 1971-72 there has been no much improvement in the total area of food grains which remained around 125 million ha. This is understandable because there is pressure on land due to increase in population as well as industrialisation. Within cereals there has been a slight decline in the area of cereals from 101.8 to 100.2 million ha. However, area under pulses has gained some area from 22.6 to 24.8 million ha. However, within cereals there were some changes that took place. The area under rice, wheat and maize have improved significantly (20 million ha together). The largest increase was in case of wheat crop area (11.7 million ha). However, this increase in area of above crops has come from the 11.1 million ha decline in Jowar area and remaining area from other millets. Similarly, area under the Oilseeds, Sugarcane and Cotton has also increased.

Table 24.1. Area under major agricultural crops from 1970-1 to 2011-12.

Group/Commodity	(Million hectares)							
	1970-1	1980-1	1990-1	2000-1	2007-8	2008-9	2009-1	2010-11
Foodgrains	124.3	126.7	127.8	121.0	124.1	122.8	121.3	126.7

Cereals	101.8	104.2	103.2	100.7	100.4	100.7	98.0	100.3
Pulses	22.6	22.5	24.7	20.3	23.6	22.1	23.3	26.4
Rice	37.6	40.1	42.7	44.7	43.9	45.5	41.9	42.9
Wheat	18.2	22.3	24.2	25.7	28.0	27.8	28.5	29.1
Jowar	17.4	15.8	14.4	9.9	7.8	7.5	7.7	7.4
Maize	5.8	6.0	5.9	6.6	8.1	8.2	8.3	8.6
Oilseeds ^a	16.6	17.6	24.1	22.8	26.7	27.5	26.0	27.2
Groundnut	7.3	6.8	8.3	6.6	6.3	6.2	5.5	5.9
Rapeseed and Mustard	3.3	4.1	5.8	4.5	5.8	6.3	5.6	6.9
Sugarcane	2.6	2.7	3.7	4.3	5.1	4.4	4.2	4.9
Cotton	7.6	7.8	7.4	8.6	9.4	9.4	10.1	11.2

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation.

^a include groundnut, rapeseed & mustard, sesamum, linseed, castor seed, niger seed, safflower, sunflower and soyabean.

24.4 PRODUCTION OF MAJOR CROPS

During the Eleventh Plan period, foodgrains production in the country recorded an increasing trend, except in 2009-10 when total foodgrains production declined to 218.1 million tonnes due to severe drought experienced in various parts of the country. During 2011-12, total foodgrains production reached an all-time high of 259.32 million tonnes.

The production trend of major agricultural commodities in India is given in the table 24.2. Though there was no significant increase in the area under foodgrains, the production registered a record increase from 108 to 259 Million Tonnes from 1970-71 to 2011-12. Most of the increase in the food grains may be attributed to rice and wheat which increased by 62 and 70 Million Tonnes respectively during same period. Apart from these crops production of pulses and maize also have improved with increase in the production of maize being more pronounced. The similar increase was also achieved in case of Oilseeds, Sugarcane, and cotton in this period. However, among oilseeds, the production of Groundnut did not increase with the same pace as of other oilseeds.

Table 24.2. Production of major agricultural crops from 1970-1 to 2011-12.

Group/Commodity	1970-1	1980-1	1990-1	2000-1	2007-8	2008-9	2009-10	2011-12
Foodgrains	108.4	129.6	176.4	196.8	230.8	234.4	218.1	218.1
Cereals	96.6	119.0	162.1	185.7	216.0	219.9	203.4	203.4
Pulses	11.8	10.6	14.3	11.0	14.8	14.6	14.7	14.7
Rice	42.2	53.6	74.3	85.0	96.7	99.2	89.1	89.1
Wheat	23.8	36.3	55.1	69.7	78.6	80.7	80.8	80.8
Jowar	8.1	10.4	11.7	7.5	7.9	7.2	6.7	6.7
Maize	7.5	7.0	9.0	12.0	19.0	19.7	16.7	16.7
Oilseeds ^a	9.6	9.4	18.6	18.4	29.8	27.7	24.9	24.9
Groundnut	6.1	5.0	7.5	6.4	9.2	7.2	5.4	5.4
Rapeseed and Mustard	2.0	2.3	5.2	4.2	5.8	7.2	6.6	6.6
Sugarcane	126.4	154.2	241.0	296.0	348.2	285.0	292.3	292.3
Cotton ^b	4.8	7.0	9.8	9.5	25.9	22.3	24.0	24.0

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation.

^a Include groundnut, rapeseed & mustard, sesamum, linseed, castorseed, nigerseed, safflower, sunflower and soyabean.

^b Bales of 170 Kgs.

24.5 YIELD OF MAJOR AGRICULTURAL CROOPS

Growth in the production of agricultural crops depends upon acreage and yield. Given the limitations in the expansion of acreage, the main source of long-term output growth is improvement in yields. The yield of major agricultural crops is given in the table 24.3. Yield

of all the crops increased over the years. Except for the pulses the increase in the yield is significant in these years. In the case of wheat, the growth in area and yield have been marginal during 2000-01 to 2010-11 suggesting that the yield levels have plateaued for this crop. This suggests the need for renewed research to boost production and productivity.

Table 24.3: Yield of major agricultural crops from 1970-1 to 2011-12. (Kg/hectare)

Group/Commodity	1970-1	1980-1	1990-1	2000-1	2007-8	2008-9	2009-10	2010-
Foodgrains	872	1023	1380	1626	1860	1909	1798	193
Cereals	949	1142	1571	1844	2151	2183	2075	225
Pulses	524	473	578	544	625	659	630	691
Rice	1123	1336	1740	1901	2202	2178	2125	223
Wheat	1307	1630	2281	2708	2802	2907	2839	298
Jowar	466	660	814	764	1021	962	860	946
Maize	1279	1159	1518	1822	2335	2414	2024	254
Oilseeds ^a	579	532	771	810	1115	1007	958	119
Groundnut	834	736	904	977	1459	1163	991	141
Rapeseed and Mustard	594	560	904	935	1001	1143	1183	118
Sugarcane (tonnes/hect.)	48	58	65	69	69	65	70	70
Cotton	106	152	225	190	467	403	403	496

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation.

^ainclude groundnut, rapeseed and mustard, sesamum, linseed, castor seed, niger seed, safflower, sunflower and soyabean.

24.6 GROWTH ANALYSIS OF AREA, PRODUCTION, AND YIELD OF AGRICULTURAL CROPS

In order to have a better understanding about the trends in area, production and yield of the major crops, decadal growth rates were worked out and presented in the table 24.4.

There are limitations to the expansion of area for cultivation. Multiple cropping, improvement in yield levels and shifts in area for certain crops hold the key to the long-term output growth. An analysis of the all-India compound annual growth rate (CAGR) in the indices of area, production, and yield of major agricultural crops during the last three decades indicates significant progress towards increasing production, yield levels and crop diversification. Overall, the 1980-90 period witnessed relatively higher growth in production and yield in major crops compared to the 1990-2000 period except for the marginal increase in growth of yield in coarse cereals and the same levels of growth in production of wheat and sugarcane. Further, a lower growth (coarse cereals, pulses, sugarcane) and marginally higher growth (rice, oilseeds) was observed in the area under these major crops during the 1990-2000 period vis a vis 1980-1990 except in wheat and cotton where growth rate was 1.72 per cent and 2.71 per cent respectively. By and large the growth rates achieved in the 1980-90 period could not be sustained during the 1990-2000 period. In coarse cereals yield increases were able to offset a negative growth in area. In both wheat and rice, in all the three sub periods, there was an increase in area and yield, though rate of increase in yield levels had significantly moderated in latter periods. Yield levels significantly improved for cotton, pulses and coarse cereals during 2000-2012. Cotton and pulses have become two 'star' performers, with Bt cotton and the pulses intensification programme being important reasons; oilseeds such as mustard and ground nuts too are responding reasonably well to better prices, as is the case in sugarcane.

Table 24.4: Decadal growth rates in Area, production and yield

	1980-81 to 1989-90			1990-91- to 1999-2000			2000-01 to 2011	
	Area	Production	Yield	Area	Production	Yield	Area	Production
Rice	0.41	3.62	3.19	0.68	2.02	1.34	0	1.78
Wheat	0.46	3.57	3.1	1.72	3.57	1.83	1.35	2.61
Coarse cereals	-1.34	0.4	1.62	-2.12	-0.02	1.82	-0.81	3.01
Total pulses	-0.09	1.52	1.61	-0.6	0.59	0.93	1.6	3.69
Sugarcane	1.44	2.7	1.24	-0.07	2.73	1.05	1.38	2.07
Total oilseeds	1.51	5.2	2.43	0.86	1.63	1.15	2.12	3.36
Cotton	-1.25	2.8	4.1	2.71	2.29	-0.41	3.22	13.53

Source: Economic Survey 2012-13

24.7 LIVESTOCK AND POULTRY POPULATION

The table 24.5 provides the data about the livestock and poultry population according to 2003 and 2007 census along with the growth rates. We can observe that there was a positive growth in total livestock and poultry population in 2007. However, there was negative growth in case of Mithuns, Pigs and Other animal category. Overall the growth was higher according to 2003 census compared to 2007 census.

Table 24.5: Livestock and poultry population and growth

Species	Livestock census		Growth rate	
	2003	2007	2003	2007
Cattle	185.2	199.1	7.5	1.83
Buffalo	97.9	105.3	7.58	1.84
Yaks	0.1	0.1	27.95	6.36
Mithuns	0.3	0.3	-4.92	-1.25
Total Bovines	283.4	304.8	7.52	1.83
Sheep	61.5	71.6	16.41	3.87
Goat	124.4	140.5	13.01	3.1
Pigs	13.5	11.1	-17.65	-4.74
Other animals	2.2	1.7	-22.93	-6.3
Total Livestock	485	529.7	9.22	2.23
Poultry	489	648.9	32.69	7.33

Source: 17th & 18th Livestock Census, Department of Animal Husbandry, Dairying & Fisheries, M/O Agriculture

24.8 PRODUCTION OF LIVESTOCK AND FISH PRODUCTS

India has achieved a number one status in milk production in the world with 127.9 million tonnes in 2011-12 from mere 17 million tonnes in 1950-51. This achievement has been greatly credited to the operation flood programme which has drawn accolades throughout the world. Similar improvement in the production of eggs, wool, meat and fish production has been made by India. The details about the production is given in the table 24.6

Table 24.6: Production of major livestock and fish products

Year	Milk (million tonnes)	Eggs (million no.)	Wool (million kgs)	Meat* (million tonnes)	Fish products (‘000 tonnes)
1950-51	17	1,832	27.5		752
1960-61	20	2,881	28.7		1160
1970-71	22	6172			1756
1980-81	31.6	10,060	32		2442
1990-91	53.9	21,101	41.2		3836
2000-01	80.6	36,632	48.4	1.9	5656
2010-11	121.8	63,024	43	4.8	8400
2011-12	127.9	66450	46		8700

Source: Economic Survey, 2012-13 & Annual report, 2011-12, Dept of animal husbandry dairying & fisheries, Ministry of Agriculture, Government of India, New delhi

24.9 State wise production of important crops

The table 24.6 provides the major top states producing the major crops in India.

Table 24.6: Production of important crops in three largest producing states

Crops/Groups of Crops	States	Production	% Share of production to All India	Cumulative % share of production
Rice	West Bengal	14.85	14.24	14.24
	Uttar Pradesh	14.03	13.45	27.68
	Andhra Pradesh	12.89	12.36	40.04
Wheat	Uttar Pradesh	30.29	32.26	32.26
	Punjab	17.21	18.33	50.59

	Haryana	12.68	13.50	64.09
Maize	Karnataka	4.09	18.96	18.96
	Andhra Pradesh	3.76	17.43	36.39
	Maharashtra	2.30	10.66	47.06
Groundnut	Gujarat	2.64	38.10	38.10
	Tamil Nadu	1.07	15.44	53.54
	Andhra Pradesh	0.85	12.27	65.80
Rapeseed & Mustard	Rajasthan	2.97	43.81	43.81
	Madhya Pradesh	0.87	12.83	56.64
	Haryana	0.86	12.68	69.32
Soyabean	Madhya Pradesh	6.28	51.14	51.14
	Maharashtra	4.03	32.82	83.96
	Rajasthan	1.39	11.32	95.28
Sunflower	Karnataka	0.19	38.00	38.00
	Andhra Pradesh	0.12	24.00	62.00
	Maharashtra	0.05	10.00	72.00
Sugarcane	Uttar Pradesh	128.82	36.02	36.02
	Maharashtra	81.86	22.89	58.90
	Tamil Nadu	39.28	10.98	69.89
Cotton ^a	Gujarat	12.00	34.09	34.09

	Maharashtra	7.20	20.45	54.55
	Andhra Pradesh	4.90	13.92	68.47

^aProduction in million bales of 170 kgs.



Lesson-25 Consumption of Agricultural Products

25.1 INTRODUCTION

Study of food consumption pattern or expenditure pattern is very important as it is related to poverty and standard of living of our society. It is necessary to study the changes in food consumption pattern under the changing situations of liberalization, privatization and globalization. The analysis of changing food consumption pattern over time would help in designing appropriate policies related to food production and distribution. Food expenditure pattern is an excellent indicator of economic well being of people. If the society is wealthy proportionately high expenditure will be made on secondary necessities, comfort, luxury products and conspicuous consumption. On the other, if the society is at subsistence level, people will spend proportionately more on food. This lesson explains how the consumption pattern has changed over the period.

25.2 FACTORS INFLUENCING CONSUMPTION PATTERN

A number of factors can influence household consumption patterns. These can be economic (e.g., income and price changes), social (e.g., urbanisation leading to dietary changes), cultural (e.g., influences by exotic lifestyles), and market development that makes new foods available. Among these factors, however, income is seen to be the most influential. There are a number of studies that show that the level of income affects not only the level but also the composition of food consumption. The increase in consumer income in fast-growing developing countries tends to induce greater changes in the composition of food consumption.

25.3 CONSUMPTION PATTERN: From cereals to High Value Products

The National Sample Survey (NSS) data are used in our analysis. The NSS data are collected by the National Sample Survey Organisation (NSSO) under the Ministry of Planning from a large sample of households through various annual rounds. The data have a high reputation and acceptance in research and policy. Not all annual rounds extensively cover household consumption behaviour; instead, a comprehensive data collection takes place about every 5 or 6 years. In this study, we use information from NSS surveys conducted in 1970-71, 1977-78, 1983, 1987-88, 1993/94, 1999/00 and 2004/05. These are national surveys with sample sizes of over 100,000 households (both rural and urban). The rural and urban samples are distinct and their results are reported separately. NSSO publishes summary results soon after each survey. More detailed survey reports are generally published a few years later.

Presented in Table 25.1 are changes in total consumption expenditures over the period 1970/71 to 2004/05. They are averages over all income classes. In rural areas, foods dominate the consumption expenditure. Within foods, cereals dominate. Nonetheless, the percentage of expenditure on foods has dropped from 73.6% in 1970/71 to 55.0% in 2004/05. The percentage of expenditure on cereals within food has dropped from a dominant 54.4% to 32.7% during the same time period. After cereals, livestock products clearly are the

next important food group, with an expenditure share reaching 21.4% in 2004/05, being the second largest. Table 1 show that the share of vegetables increased two folds in 2004/5 compared to the period 1970/71. It is noted, however, the growth in expenditure share on edible oils and vegetables and fruits was quite impressive between 1970/71 and 2004/05. In urban areas, the share of expenditure on food has also dropped but still remains substantial at 42.5%. However, the importance (share) of livestock products has increased to 25% by 2004/05, surpassing the share of cereals which has fallen to 23.7%. The cross-over is recent and took place between the last two surveys. Other foods such as pulses, edible oils, and vegetables and fruits lag substantially behind livestock products. Thus it can be understood that there is a clear shift in the consumption pattern from cereals to high value products like, livestock products and vegetables.

The results show that, in both rural and urban areas, livestock products have risen substantially in importance. It is noted that, food expenditure in India by 2004/05 still accounted for a significant share of total consumption expenditure, being 50% on an all-India basis, with rural being 55% and urban 42.5%.

Table 25.1. Consumption Expenditure: Rs. Average Per Capita per Month

Item	Value (Rs)						
	1970/1	1977/8	1983	1987/8	1993/4	1999/00	
Rural							
Cereals	14.14	22.82	36.52	41.54	68.13	107.75	
Pulses	1.56	2.92	4.25	6.65	10.72	18.5	
Livestock Products	4.03	7.13	11.85	18.74	36.09	58.7	
Edible oils	1.26	2.46	4.53	8.88	12.43	18.16	
Vegetables	1.7	3.37	6.86	10.8	21.9	38.34	
Other Food Items	3.27	5.63	9.71	15.21	28.5	47.35	
Food Total	25.98	44.33	73.73	100.82	177.77	288.8	
Non-food Total	9.33	24.56	38.71	57.28	103.63	197.36	
Total Cons. Expenditure	35.31	68.89	112.45	158.1	281.4	486.16	
No. of sample hhs	87593	99766	75911	83039	69206	71385	

Urban							
Cereals	12.12	19.76	31.98	37.14	64.27	105.57	
Pulses	1.76	3.67	5.6	8.85	13.92	24.25	
Livestock Products	6.91	12.49	21.07	32.68	60.39	100.95	
Edible oils	2.41	4.46	7.94	13.23	20.09	26.81	
Vegetables	3.35	6.11	11.63	19.39	37.17	64.58	
Other Food Items	7.49	11.18	18.75	28.46	54.48	88.68	
Food Total	34.04	57.67	96.97	139.75	250.32	410.84	4
Non-food Total	18.81	38.48	67.06	110.18	207.72	444.08	6
Total Cons. Expenditure	52.85	96.15	164.03	249.93	458.04	854.92	1
No. of sample hhs	18930	58162	41983	45989	46148	48924	

Table 25.2 provides further details about the levels and composition of food demand and livestock product demand in India. It is based on the latest data from NSS (2007) for 2004/05. All-India results are a weighted average using population as the weight. The results indicate substantial diversity in consumption quantities and values. The total consumption expenditure at Rs 1052 per month in urban areas is almost twice that in rural areas at Rs 559 per month. However, the total food expenditure does not differ by that much, with a difference being Rs 140. It is important to note that the consumption difference in livestock products explains the largest portion of the total food consumption difference. This suggests that there is an enormous potential for an increase in livestock product consumption if rural income was higher given the huge rural population in India.

Table 25.2. Per Capita Consumption: Quantity and Value Per Month, 2004/05

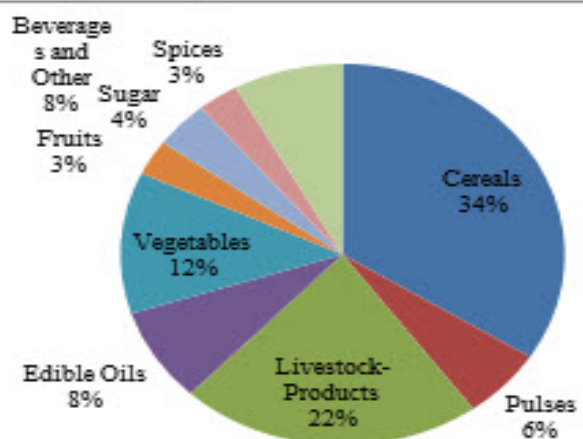
Item	Rural		Urban		All India	
	Quantity (Kg)	Value (Rs)	Quantity (Kg)	Value (Rs)	Quantity (Kg)	Value (Rs)
Rice	6.38	58.93	4.71	56.14	5.95	
Wheat	4.19	29.83	4.36	38.86	4.23	

Cereals	12.11	100.65	9.94	105.82	11.56
Pulses	0.71	17.91	0.82	23.62	0.74
Livestock Products		65.91	-	111.77	-
Edible Oils	0.48	25.72	0.66	36.37	0.53
Vegetables		36.23	-	49.91	-
Fruits		10.42	-	23.65	-
Sugar	0.74	13.25	0.87	15.88	0.77
Spices (gm)	75.92	10.62	189.76	13.13	104.74
Beverages & Others	-	25.37	-	65.31	-
Total Food		307.60	-	447.41	-
Total Non-food		251.18	-	604.95	-
Total	-	558.78	-	1052.36	-

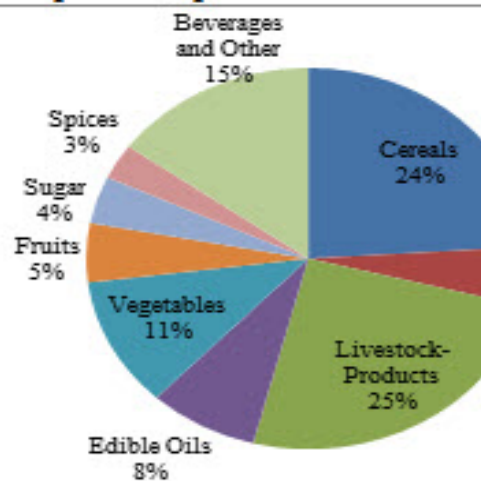
Figure 25.1 shows the distribution of food expenditure across different food commodity groups. In rural areas, cereals constitute a larger share of food expenditure at 34%. This is followed by livestock products and vegetables which constitute 22% & 12% of the food expenditure respectively. In urban areas, the share of the livestock products at 25% is the highest in foods, followed by cereals and vegetables with 21% & 11% of the food expenditure respectively. Thus, although cereals still dominate at the national level, high value product like livestock product has surpassed cereals in importance in urban areas. However, there is a clear trend of shift towards high value products at all India level.

Figure 25.1. Share of consumer food expenditure: Rural, Urban, and All India, 2004/05

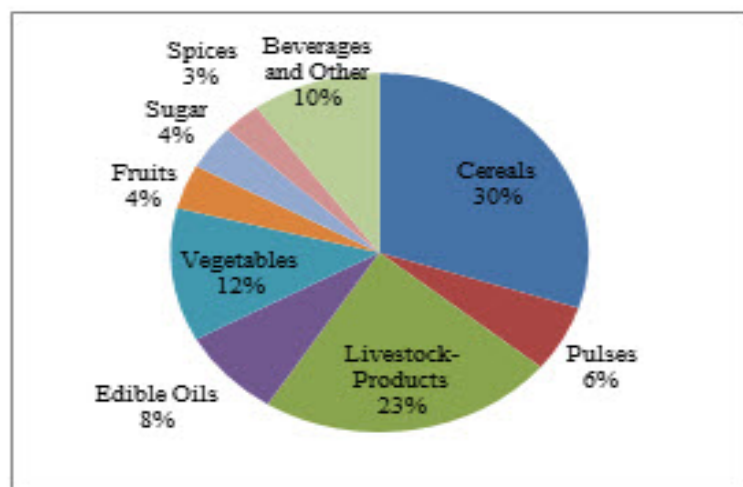
Consumption Expenditure : Rural



Consumption Expenditure : Urban



Consumption Expenditure: All India



Lesson-26 Agricultural Marketing – Meaning & Importance**26.1 INTRODUCTION**

Production is the half the work done for any producer, either a farmer or an agribusiness firm. The other half consists of marketing the product so that it reaches the consumer. In the following chapters we will be discussing various aspects of the agricultural marketing. In the present chapter, we will understand the concept and meaning of agricultural marketing, its scope and its importance.

26.2 CONCEPT AND DEFINITION

The term agricultural marketing is composed of two words-agriculture and marketing. Agriculture, in the broadest sense, means activities aimed at the use of natural resources for human welfare, i.e., it includes all the primary activities of production. But, generally, it is used to mean growing and/or raising crops and livestock. Marketing connotes a series of activities involved in moving the goods from the point of production to the point of consumption. It includes all the activities involved in the creation of time, place, form and possession utility.

According to Thomsen, the study of agricultural marketing, comprises all the operations, and the agencies conducting them, involved in the movement of farm-produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumers, and the effects of such operations on farmers, middlemen and consumers. This definition does not include the input side of agriculture.

Agricultural marketing is the study of all the activities, agencies and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural products from the farms to the consumers. The agricultural marketing system is a link between the farm and the non – farm sectors. It includes the organization of agricultural raw materials supply to processing industries, the assessment of demand for farm inputs and raw materials, and the policy relating to the marketing of farm products and inputs.

According to the National Commission on Agriculture (XII Report), agricultural marketing is a process which starts with a decision to produce a saleable farm commodity, and it involves all the aspects of market structure or system, both functional and institutional, based on technical and economic considerations, and includes pre-and post-harvest operations, assembling, grading, storage, transportation and distribution.

26.3 OBJECTIVES OF THE STUDY OF AGRICULTURAL MARKETING

A study of the agricultural marketing system is necessary to an understanding of the complexities involved and the identification of bottlenecks with a view to providing efficient services in the transfer of farm products and inputs from producers to consumers. An efficient marketing system minimizes costs, and benefits all the sections of the society. The expectations from the system vary from group to group; and, generally, the objectives are in

conflict. The efficiency and success of the system depends on how best these conflicting objectives are reconciled.

- **Producers:** Producer-farmers want the marketing system to purchase their produce without loss of time and provide the maximum share in the consumer's rupee. They want the maximum possible price for their surplus produce from the system. Similarly, they want the system to supply them the inputs at the lowest possible price.
- **Consumers:** The consumers of agricultural products are interested in a marketing system that can provide food and other items in the quantity and of the quality required by them at the lowest possible price. However, this objective of marketing for consumers is contrary to the objective of marketing for the farmer – producers.
- **Market Middlemen and Traders:** Market middlemen and traders are interested in a marketing system which provides them a steady and increasing income from the purchase and sale of agricultural commodities. This objective of market middlemen may be achieved by purchasing the agricultural products from the farmers at low prices and selling them to consumers at high prices.
- **Government:** The objectives and expectations of all the three groups of society-producers, consumers and market middlemen – conflict with one another. All the three groups are indispensable to society. The government has to act as a watch-dog to safeguard the interests of all the groups associated in marketing. It tries to provide the maximum share to the producer in the consumer's rupee; food of the required quality to consumers at the lowest possible price; and enough margin to market middlemen so that they may remain in the trade and not think of going out of trade and jeopardize the whole marketing mechanism. Thus, the government wants that the marketing system should be such as may bring about the overall welfare to all the segments of society.

26.4 SCOPE AND SUBJECT MATTER OF AGRICULTURAL MARKETING

Agricultural marketing in a broader sense is concerned with the marketing of farm products produced by farmers and of farm inputs required by them in the production of these farm products. Thus, the subject of agricultural marketing includes product marketing as well as input marketing.

The subject of output marketing is as old as civilization itself. The importance of output marketing has become more conspicuous in the recent past with the increased marketable surplus of the crops following the technological breakthrough. The farmers produce their products for the markets. Farming becomes market-oriented. Input marketing is a comparatively new subject. Farmers in the past used such farm sector inputs as local seeds and farmyard manure. These inputs were available with them; the purchase of inputs for production of crops from the market by the farmers was almost negligible. The importance of farm inputs-improved seeds, fertilizers, insecticides and pesticides, farm machinery, implements and credit-in the production of farm products has increased in recent years. The new agricultural technology is input-responsive. Thus, the scope of agricultural marketing must include both product marketing and input marketing. In this book, the subject matter of

agricultural marketing has been dealt with; both from the theoretical and practical points of view. It covers what the system is, how it functions, and how the given method or techniques may be modified to get the maximum benefits.

Specially, the subject of agricultural marketing includes marketing functions, agencies, channels, efficiency and costs, price spread and market integration, producer's surplus, government policy and research, training and statistics on agricultural marketing.

26.5 IMPORTANCE OF AGRICULTURAL MARKETING

Agricultural marketing plays an important role not only in stimulating production and consumption, but in accelerating the pace of economic development. Its dynamic functions are of primary importance in promoting economic development. For this reason, it has been described as the most important multiplier of agricultural development. The importance of agricultural marketing in economic development has been indicated in the paragraphs that follow.

- **Optimization of Resource use and Output Management:** An efficient agricultural marketing system leads to the optimization of resource use and output management. An efficient marketing system can also contribute to an increase in the marketable surplus by scaling down the losses arising out of inefficient processing, storage and transportation. A well-designed system of marketing can effectively distribute the available stock of modern inputs, and thereby sustain a faster rate of growth in the agricultural sector.
- **Increase in Farm Income:** An efficient marketing system ensures higher levels of income for the farmers by reducing the number of middlemen or by restricting the commission on marketing services and the malpractices adopted by them in the marketing of farm products. An efficient system guarantees the farmers better prices for farm products and induces them to invest their surpluses in the purchase of modern inputs so that productivity and production may increase. This again results in an increase in the marketed surplus and income of the farmers. If the producer does not have an easily accessible market-outlet where he can sell his surplus produce, he has little incentive to produce more. The need for providing adequate incentives for increased production is, therefore, very important, and this can be made possible only by streamlining the marketing system.
- **Widening of Markets:** A well-knit marketing system widens the market for the products by taking them to remote corners both within and outside the country, i.e., to areas far away from the production points. The widening of the market helps in increasing the demand on a continuous basis, and thereby guarantees a higher income to the producer.
- **Growth of Agro-based Industries:** An improved and efficient system of agricultural marketing helps in the growth of agrobased industries and stimulates the overall development process of the economy. Many industries depend on agriculture for the supply of raw materials.

- **Price Signals:** An efficient marketing system helps the farmers in planning their production in accordance with the needs of the economy. This work is carried out through price signals.
- **Adoption and Spread of New Technology:** The marketing system helps the farmers in the adoption of new scientific and technical knowledge. New technology requires higher investment and farmers would invest only if they are assured of market clearance.
- **Employment:** The marketing system provides employment to millions of persons engaged in various activities, such as packaging, transportation, storage and processing. Persons like commission agents, brokers, traders, retailers, weigh-men, hamals, packagers and regulating staff are directly employed in the marketing system. This apart, several others find employment in supplying goods and services required by the marketing system.
- **Addition to National Income:** Marketing activities add value to the product thereby increasing the nation's gross national product and net national product.
- **Better Living:** The marketing system is essential for the success of the development programmes which are designed to uplift the population as a whole. Any plan of economic development that aims at diminishing the poverty of the agricultural population, reducing consumer food prices, earning more foreign exchange or eliminating economic waste has, therefore, to pay special attention to the development of an efficient marketing for food and agricultural products.
- **Creation of Utility:** Marketing is productive, and is as necessary as the farm production. It is, in fact, a part of production itself, for production is complete only when the product reaches a place in the form and at the time required by the consumers. Marketing adds cost to the product; but, at the same time, it adds utilities to the product. The following four types of utilities of the product are created by marketing:
 - **Form Utility:** The processing function adds form utility to the product by changing the raw material into a finished form. With this change, the product becomes more useful than it is in the form in which it is produced by the farmer. For example, through processing, oilseeds are converted into oil, sugarcane into sugar, cotton into cloth and wheat into flour and bread. The processed forms are more useful than the original raw materials.
 - **Place Utility:** The transportation function adds place utility to products by shifting them to a place of need from the place of plenty. Products command higher prices at the place of need than at the place of production because of the increased utility of the product.
 - **Time Utility:** The storage function adds time utility to the products by making them available at the time when they are needed.
 - **Possession Utility:** The marketing function of buying and selling helps in the transfer of ownership from one person to another. Products are transferred through

marketing to persons having a higher utility from persons having a low utility.

Lesson-27 Agricultural Marketing Functions

27.1 INTRODUCTION

Every single activity performed in carrying a product from the point of its production to the ultimate consumer may be termed as a marketing function. A marketing function may have anyone or combination of three dimensions, viz., time, space and form. The marketing functions involved in the movement of goods from the producer to its ultimate consumer vary from commodity to commodity, market to market, the level of economic development of the country or region, and the final form of the consumption.

27.2 CLASSIFICATION OF MARKETING FUNCTIONS

The marketing functions may be classified in various ways. For example,

- Thomsen has classified the marketing functions into three broad groups. These are:

Primary Functions	Secondary Functions	Tertiary Functions
• Processing • Dispersion or Distribution	• Packing or Packaging • Transportation • Grading, Standardization and • Quality Control • Storage and Warehousing • Price Determination or Discovery • Risk Taking • Financing • Buying and Selling • Demand Creation • Dissemination of Market Information	• Banking • Insurance • Communications – posts & • Telegraphs • Supply of Energy – Electricity

- Kohls and Uhl have classified marketing functions as follows:

Physical Functions	Exchange Functions	Facilitative Functions
--------------------	--------------------	------------------------

	FUNCTIONS	
• Storage and Warehousing • Grading • Processing • Transportation	• Buying & Selling	• Standardization of grades • Financing • Risk Taking • Dissemination of Market Information

- Huegy and Mitchell have classified marketing functions in a different way. According to them, the classification is as follows:

Physical Movement Functions	Ownership Movement Functions	Market Management Functions
• Storage • Packing • Transportation • Grading • Distribution	• Determining Need • Creating Demand • Finding Buyers and Sellers • Negotiation of Price • Rendering Advice • Transferring the Title to Goods	• Formulating Policies • Financing • Providing organization • Supervision • Accounting • Securing Information

27.3 PACKAGING

Packaging is the first function performed in the marketing of agricultural commodities. It is required for nearly all farm products at every stage of the marketing process. The type of the container used in the packing of commodities varies with the type of the commodity as well as with the stage of marketing. For example, gunny bags are used for cereals, pulses and oilseeds when they are taken from the farm to the market. For packing milk or milk products, plastic, polythene, tin or glass containers are used. Wooden boxes or straw baskets are used for packing fruits and vegetables.

27.3.1 Meaning of Packing and Packaging

Packing means, the wrapping and crating of goods before they are transported. Goods have to be packed either to preserve them or for delivery to buyers. Packaging is a part

of packing, which means placing the goods in small packages like bags, boxes, bottles or

of packing, which means placing the goods in small packages like bags, boxes, bottles or parcels for sale to the ultimate consumers. In other words, it means putting goods on the market in the size and pack which are convenient for the buyers.

27.3.2 Advantages of Packing and Packaging

Packaging is a very useful function in the marketing process of agricultural commodities. Most of the commodities are packed with a view to preserving and protecting their quality and quantity during the period of transit and storage. For some commodities, packing acts as a powerful selling tool. The chief advantages of packing and packaging are:

1. It protects the goods against breakage, spoilage, leakage or pilferage during their movement from the production to the consumption point.
2. The packaging of some commodities involves compression, which reduces the bulk like cotton, jute and wool.
3. It facilitates the handling of the commodity, specially such fruits as apples, mangoes, etc., during storage and transportation.
4. It helps in quality-identification, product differentiation, branding and advertisement of the product, e.g., Nandini milk and Amul butter.
5. Packaging helps in reducing the marketing costs by reducing the handling and retailing costs.
6. It helps in checking adulteration.
7. Packaging ensures cleanliness of the product.
8. Packaging with labelling facilitates the conveying of instructions to the buyers as to how to use or preserve the commodity. The label shows the composition of the product.
9. Packaging prolongs the storage quality of the products by providing protection from the ill effects of weather, especially for fruits, vegetables and other perishable goods.

27.4 TRANSPORTATION

Transportation or the movement of products between places is one of the most important marketing functions at every stage, i.e., right from the threshing floor to the point of consumption. Most of the goods are not consumed where they are produced.

All agricultural commodities have to be brought from the farm to the local market and from there to primary wholesale markets, secondary wholesale markets, retail markets and ultimately to the consumers. The outputs from the factories must be taken to the warehouses and from the warehouses to the wholesalers, retailers and finally to the consumers (farmers). Transportation adds the place utility to goods.

Transport is an indispensable marketing function. Its importance has increased with urbanization. For the development of trade in any commodity or in any area transport is a sine qua non. Trade and transport go side by side; the one reinforces and strengthens the other.

27.4.1 Advantages of Transport Function:

The main advantages of the transport function are:

- 1. Widening of the Market:** Transport helps in the development or widening of markets by bridging the gap between the producers and consumers located in different areas.
- 2. Narrowing Price Difference Over Space:** The transportation of goods from surplus areas to the places of scarcity helps in checking price rises in the scarcity areas and price falls in surplus areas.
- 3. Creation of Employment:** The transport function provides employment to a large number of persons through the construction of roads, loading and unloading, playing of the means of transportation, etc.
- 4. Facilitation of Specialized Farming:** Farmers can go in for specialization in the commodity most suitable to their area, and exchange the goods required by them from other areas at a cheaper price than their own production cost.
- 5. Transformation of the Economy:** Transportation helps in the transformation of the economy from the subsistence stage to the developed commercial stage.
- 6. Mobility of the Factors of Production:** Transport helps in increasing the mobility of capital and labour from one area to another.

27.5 GRADING AND STANDARDIZATION

Grading and standardization is a marketing function which facilitates the movement of produce. Without standardization the rule of caveat emptor (let the buyer beware) prevails; and there is confusion and unfairness as well. Standardization is a term used in a broader sense. Grade standards for commodities are laid down first and then the commodities are sorted out according to the accepted standards.

Products are graded according to quality specifications. But if these quality specifications vary from seller to seller, there would be a lot of confusion about its grade. The top grade of one seller may be inferior to the second grade of another. This is why buyers lose confidence in grading. To avoid this eventuality, it is necessary to have fixed grade standards which are universally accepted and followed by all in the trade. Standardization means the determination of the standards to be established for different commodities.

27.5.1 Types of Grading

Grading may be done on the basis of fixed standards or variable standards. It is of three types:

- 1. Fixed Grading / Mandatory Grading:** This means sorting out of goods according to the size, quality and other characteristics which are of fixed standards. These do not vary over time and space.

2. Permissive / Variable Grading: The goods are graded under this method according to standards, which vary over time. The grade specifications in this case are fixed over time and space, but changed every year according to the quality of the produce in that year.

3. Centralized / Decentralized Grading: Based on the degree of supervision exercised by the government agencies on grading of various farm products, the programme can be categorized into centralized and decentralized grading.

Under the centralized grading system, an authorized packer either sets up his own laboratory manned by qualified chemists or seeks access to an approved grading laboratory set up for the purpose by the state authorities / co-operatives / associations / private agencies.

The decentralized grading system is implemented by State Marketing Authorities under the overall supervision and guidance of the Directorate of Marketing and Inspection. This is followed in those commodities which do not require elaborate testing arrangements for quality assessment.

27.5.2 Advantages of Grading;

Grading offers the following advantages to different groups of persons:

1. Grading before sale enables farmers to get a higher price for their produce.
2. Grading facilitates marketing, for the size, color, qualities and other grade designations of the product are well known to both the parties, and there is no need on the part of the seller to give any assurance about the quality of the product.
3. Grading widens the market for the product.
4. Grading reduces the cost of marketing by minimizing the expenses on the physical inspection of the produce, minimizing storage losses, reducing its bulk, minimizing advertisement expenses and eliminating the cost of handling and weighing at every stage.
5. Grading helps consumers to get standard quality products at fair prices.
6. Grading contributes to market competition and pricing efficiency.

27.6 STORAGE:

Storage is an important marketing function, which involves holding and preserving goods from the time they are produced until they are needed for consumption. The storage function, therefore, adds the time utility to products.

The storage function is as old as man himself, and is performed at all levels in the trade.

Producers hold a part of their output on the farm. Traders store it to take price advantage.

The storage of agricultural products is necessary for the following reasons:

1. Agricultural products are seasonally produced but are required for consumption

1. Agricultural products are seasonally produced, but are required for consumption throughout the year.
2. Storage protects the quality of perishable and semi – perishable products from deterioration;
3. Some of the goods, e.g., woollen garments, have a seasonal demand.
4. It helps in the stabilization of prices by adjusting demand and supply.
5. Storage is necessary for some period for the performance of other marketing functions.
6. The storage of some farm commodities is necessary either for their ripening (e.g., banana, mango, etc.) or for improvement in their quality (e.g., rice, pickles, cheese, tobacco, etc.); and

27.6.1 Risks in Storage:

The storage of agricultural commodities involves three major types of risks. These are:

1. **Quantity Loss:** The risks of loss in quantity may arise during storage as a result of the presence of rodents, insects and pests, theft, fire, etc.
2. **Quality Deterioration:** The second important risk involved in the storage of farm products is the deterioration in quality, which reduces the value of the stored products.
3. **Price Risk:** This, too, is an important risk involved in the storage of farm products. Prices do not always rise enough during the storage period to cover the storage costs.

27.7 PROCESSING:

This activity is discussed in the chapter-35 in detail

27.8 BUYING AND SELLING:

Buying and selling is the most important activity in the marketing process. At every stage, buyers and sellers come together, goods are transferred from seller to buyer, and the possession utility is added to the commodities.

The objective of selling is to dispose of the goods at a satisfactory price.

27.8.1 Methods in buying and selling:

The following methods of buying and selling of farm products are prevalent in Indian markets:

- (i) Under Cover of a Cloth (Hatha System)
- (ii) Private Negotiations:
- (iii) Quotations on Samples taken by Commission Agent:
- (iv) Dara Sale Method
- (v) Moghum Sale Method.

(vi) Open Auction Method:

(vii) Close Tender System:

27.9 MARKET INFORMATION:

Meaning: Market information may be broadly defined as a communication or reception of knowledge or intelligence. It includes all the facts, estimates, opinions and other information which affect the marketing of goods and services.

Types of Market Information:

Market information is of two types

- a) Market Intelligence: This includes information relating to such facts as the prices that prevailed in the past and market arrivals over time.
- b) Market News: This term refers to current information about prices, arrivals and changes in market conditions. This information helps the farmer in taking decisions about when and where to sell his produce.

27.10 FINANCING:

No business is possible nowadays without the financial support of other agencies because the owned funds available with the producers and market middlemen (such as wholesalers, retailers and processors) are not sufficient. The financial requirements increase with the increase in the price of the produce and the cost of performing various marketing services. In the words of Pyle: “Money or credit is the lubricant that facilitates the marketing machine.”

Nature and volume of business, necessity of carrying large stocks, continuity of business during various seasons, time required between production and sale, terms of payment for purchase and sale, fluctuations in prices, risk-taking capacity, general conditions in the economy are the some of the factors affecting capital requirements of an agricultural marketing firm

Lesson-28 Classification of Markets

28.1 INTRODUCTION

Agricultural markets exist in different formats. Based on some of the criteria they can be classified in to different categories. Some of such criteria considered in this lesson are location, area, time span, volume of transaction, nature of transaction, degree of competition etc. In the subsequent paragraphs we will be discussing these in detail.

28.2 MARKET CLASSIFICATION

Markets may be classified on the basis of each of the twelve dimensions mentioned below.

1. On the basis of Location:

On the basis of the place of location or operation, markets are of the following types:

- **Village Markets:** A market which is located in a small village, where major transactions take place among the buyers and sellers of a village is called a village market.
- **Primary wholesale Markets:** These markets are located in big towns near the centers of production of agricultural commodities. In these markets, a major part of the produce is brought for sale by the producer-farmers themselves. Transactions in these markets usually take place between the farmers and traders.
- **Secondary wholesale Markets:** These markets are located generally in district headquarters or important trade centers or near railway junctions. The major transactions in commodities take place between the village traders and wholesalers. The bulk of the arrivals in these markets are from other markets.
- The produce in these markets is handled in large quantities. There are, therefore, specialized marketing agencies performing different marketing functions, such as those of commission agents, brokers, weigh men, etc.
- **Terminal Markets:** A terminal market is one where the produce is either finally disposed of to the consumers or processors, or assembled for export. Merchants are well organized and use modern methods of marketing. Commodity exchanges exist in these markets, which provide facilities, for forward trading in specific commodities. Such markets are located either in metropolitan cities or in sea-ports – in Bombay, Madras, Calcutta and Delhi.
- **Seaboard Markets:** Markets which are located near the seashore and are meant mainly for the import and/or export of goods are known as seaboard markets. Examples of these markets in India are Bombay, Madras, and Calcutta.

2. On the Basis of Area/Coverage:

On the basis of the area from which buyers and sellers usually come for transactions, markets may be classified into the following four classes:

- **Local or Village Markets:** A market in which the buying and selling activities are confined among the buyers and sellers drawn from the same village or nearby villages. The village markets exist mostly for perishable commodities in small lots, e.g., local milk market or vegetable market.
- **Regional Markets:** A market in which buyers and sellers for a commodity are drawn from a larger area than the local markets. Regional markets in India usually exist for food grains.
- **National Markets:** A market in which buyers and sellers are at the national level. National markets are found for durable goods like jute and tea.
- **World Market:** A market in which the buyers and sellers are drawn from the whole world. These are the biggest markets from the area point of view. These markets exist in the commodities which have a world-wide demand and/or supply, such as coffee, machinery, gold, silver, etc. In recent years many countries are moving towards a regime of liberal international trade in agricultural products like raw cotton, sugar, rice and wheat.

3. On the Basis of Time Span:

On this basis, markets are of the following types:

- **Short-period Markets:** The markets which are held only for a few hours are called short-period markets. The products dealt within these markets are of highly perishable nature, such as fish, fresh vegetables, and liquid milk. In these markets, the prices of commodities are governed mainly by the extent of demand for, rather than by the supply of, the commodity.
- **Long-period Markets:** These markets are held for a long period than the short-period markets. The commodities traded in these markets are less perishable and can be stored for some time; these are food grains and oilseeds. The prices are governed both by the supply and demand forces.
- **Secular Markets:** These are markets of permanent nature. The commodities traded in these markets are durable in nature and can be stored for many years. Examples are markets for machinery and manufactured goods.

4. On the Basis of Volume of Transactions:

There are two types of markets on the basis of volume of transactions at a time.

- **Wholesale Markets:** A wholesale market is one in which commodities are bought and sold in large lots or in bulk. Transactions in these markets take place mainly between traders.
- **Retail Markets:** A retail market is one in which commodities are bought by and sold to the consumers as per their requirements. Transactions in these markets take

place between retailers and consumers. The retailers purchase in wholesale market and sell in small lots to the consumers. These markets are very near to the consumers.

5. On the Basis of Nature of Transactions:

- The markets which are based on the types of transactions in which people are engaged are of two types:
- **Spot or Cash Markets:** A market in which goods are exchanged for money immediately after the sale is called the spot or cash market.
- **Forward Markets:** A market in which the purchase and sale of a commodity takes place at time “t” but the exchange of the commodity takes place on some specified date in future i.e., time $t + 1$. Sometimes even on the specified date in the future ($t+1$), there may not be any exchange of the commodity. Instead, the differences in the purchase and sale prices are paid or taken.

6. On the Basis of Number of Commodities in which Transaction takes place:

- A market may be general or specialized on the basis of the number of commodities in which transactions are completed:
- **General Markets:** A market in which all types of commodities, such as food grains, oilseeds, fiber crops, gur, etc., are bought and sold is known as general market. These markets deal in a large number of commodities.
- **Specialized Markets:** A market in which transactions take place only in one or two commodities is known as a specialized market. For every group of commodities, separate markets exist. The examples are food grain markets, vegetable markets, wool market and cotton market.

7. On the Basis of Degree of Competition:

Each market can be placed on a continuous scale, starting from a perfectly competitive point to a pure monopoly or monopsony situation. Extreme forms are almost non-existent. Nevertheless, it is useful to know their characteristics. In addition to these two extremes, various midpoints of this continuum have been identified. On the basis of competition, markets may be classified into the following categories:

- **Perfect Markets:** A perfect market is one in which the following conditions hold good:
 - There are a large number of buyers and sellers;
 - All the buyers and sellers in the market have perfect knowledge of demand, supply and prices;
 - Prices at any one time are uniform over a geographical area, plus or minus the cost of getting supplies from surplus to deficit areas;
 - The prices of different forms of a product are uniform, plus or minus the cost of converting the product from one form to another.

- The prices are uniform at any one place over periods of time, plus or minus the cost of storage from one period to another;
- **Imperfect Markets:** The markets in which the conditions of perfect competition are lacking are characterized as imperfect markets. The following situations, each based on the degree of imperfection, may be identified:
 - **Monopoly Market:** Monopoly is a market situation in which there is only one seller of a commodity. He exercises sole control over the quantity or price of the commodity. In this market, the price of commodity is generally higher than in other markets. Indian farmers operate in a monopoly market when purchasing electricity for irrigation. When there is only one buyer of a product the market is termed as a monopsony market.
 - **Duopoly Market:** A duopoly market is one which has only two sellers of a commodity. They may mutually agree to charge a common price which is higher than the hypothetical price in a common market. The market situation in which there are only two buyers of a commodity is known as the duopsony market.
 - **Oligopoly Market:** A market in which there are more than two but still a few sellers of a commodity is termed as an oligopoly market. A market having a few (more than two) buyers is known as oligopsony market.
 - **Monopolistic competition:** When a large number of sellers deal in heterogeneous and differentiated form of a commodity, the situation is called monopolistic competition. The difference is made conspicuous by different trade marks on the product. Different prices prevail for the same basic product. Examples of monopolistic competition faced by farmers may be drawn from the input markets. For example, they have to choose between various makes of insecticides, pumpsets, fertilizers and equipments.

8. On the Basis of Nature of Commodities: On the basis of the type of goods dealt in, markets may be classified into the following categories:

- **Commodity Markets:** A market which deals in goods and raw materials, such as wheat, barley, cotton, fertilizer, seed, etc., are termed as commodity markets.
- **Capital Markets:** The market in which bonds, shares and securities are bought and sold are called capital markets; for example, money markets and share markets.

9. On the Basis of Stage of Marketing:

On the basis of the stage of marketing, markets may be classified into two categories:

- **Producing Markets:** Those markets which mainly assemble the commodity for further distribution to other markets are termed as producing markets. Such markets are located in producing areas.
- **Consuming Markets:** Markets which collect the produce for final disposal to the consuming population are called consumer markets. Such markets are

generally located in areas where production is inadequate, or in thickly populated urban centres.

10. On the Basis of Extent of Public Intervention:

Based on the extent of public intervention, markets may be placed in any one of the following two classes:

- **Regulated Markets:** Markets in which business is done in accordance with the rules and regulations framed by the statutory market organization representing different sections involved in markets. The marketing costs in such markets are standardized and practices are regulated.
- **Unregulated Markets:** These are the markets in which business is conducted without any set rules and regulations. Traders frame the rules for the conduct of the business and run the market. These markets suffer from many ills, ranging from unstandardised charges for marketing functions to imperfections in the determination of prices.

11. On the Basis of Type of Population Served:

On the basis of population served by a market, it can be classified as either urban or rural market:

- **Urban Market:** A market which serves mainly the population residing in an urban area is called an urban market. The nature and quantum of demand for agricultural products arising from the urban population is characterized as urban market for farm products.
- **Rural Market:** The word rural market usually refers to the demand originating from the rural population. There is considerable difference in the nature of embedded services required with a farm product between urban and rural demands.

12. On the Basis of Accrual of Marketing Margins:

Markets can also be classified on the basis of as to whom the marketing margins accrue. Over the years, there has been a considerable increase in the producers or consumers co-operatives or other organizations handling marketing of various products. Though private trade still handles bulk of the trade in farm products, the co-operative marketing has increased its share in the trade of some agricultural commodities like milk, fertilizers, sugarcane and sugar. In the case of marketing activities undertaken by producers or consumers co-operatives, the marketing margins are either negligible or shared amongst their members.

Lesson-29 Agricultural Market Functionaries

29.1 INTRODUCTION

All the market functionaries involved in marketing the agricultural products from producers to consumer are commonly called as middlemen. However, in some cases farmers themselves are directly involved in marketing the products. In this chapter we are going to discuss various market functionaries involved in agricultural marketing.

29.2 MARKET FUNCTIONARIES

In the marketing of agricultural commodities, the following market functionaries/marketing agencies are involved:

1. PRODUCERS:

Most farmers or producers, perform one or more marketing functions. They sell the surplus either in the village or in the market. Some farmers, especially the large ones, assemble the produce of small farmers, transport it to the nearby market, sell it there and make a profit. This activity helps these farmers to supplement their incomes. Frequent visits to markets and constant touch with market functionaries, bring home to them a fair knowledge of market practices. They have, thus, an access to market information, and are able to perform the functions of market middlemen.

2. MIDDLEMEN

Middlemen are those individuals or business concerns which specialize in performing the various marketing functions and rendering such services as are involved in the marketing of goods. They do this at different stages in the marketing process. The middlemen in foodgrain marketing may, therefore, be classified as follows:

A. Merchant Middlemen: Merchant middlemen are those individuals who take title to the goods they handle. They buy and sell on their own and gain or lose, depending on the difference in the sale and purchase prices. They may, moreover, suffer loss with a fall in the price of the product. Merchant middlemen are of two types:

Wholesalers: Wholesalers are those merchant middlemen who buy and sell foodgrains in large quantities. They may buy either directly from farmers or from other wholesalers. They sell foodgrains either in the same market or in other markets. They sell to retailers, other wholesalers and processors. They do not sell significant quantities to ultimate consumers. They own godowns for the storage of the produce. The wholesalers perform the following functions in marketing:

- (a) They assemble the goods from various localities and areas to meet the demands of buyers;

- (b) They sort out the goods in different lots according to their quality and prepare them for the market;
- (c) They equalize the flow of goods by storing them in the peak arrival season and releasing them in the off-season;
- (d) They regulate the flow of goods by trading with buyers and sellers in various markets;
- (e) They finance the farmers so that the latter may meet their requirements of production inputs; and
- (f) They assess the demand of prospective buyers and processors from time to time, and plan the movement of the goods over space and time.

Retailers: Retailers buy goods from wholesalers and sell them to the consumers in small quantities. They are producers' personal representatives to consumers. Retailers are the closest to consumers in the marketing channel. **Itinerant Traders and Village Merchants:** Itinerant traders are petty merchants who move from village to village, and directly purchase the produce from the cultivators. They transport it to the nearby primary or secondary market and sell it there. Village merchants have their small establishments in villages.

They purchase the produce of those farmers who have either taken finance from them or those who are not able to go to the market. Village merchants also supply essential consumption goods to the farmers. They act as financiers of poor farmers. They often visit nearby markets and keep in touch with the prevailing prices. They either sell the collected produce in the nearby market or retain it for sale at a later date in the village itself.

B. Agent Middlemen:

Agent middlemen act as representatives of their clients. They do not take title to the produce and, therefore, do not own it. They merely negotiate the purchase and/or sale. They sell services to their principals and not the goods or commodities. They receive income in the form of commission or brokerage. They serve as buyers or sellers in effective bargaining. Agent middlemen are of two types

Commission Agents or Arhatias: A commission agent is a person operating in the wholesale market who acts as the representative of either a seller or a buyer. He is usually granted broad powers by those who consign goods or who order the purchase. A commission agent takes over the physical handling of the produce, arranges for its sale, collects the price from the buyer, deducts his expenses and commission, and remits the balance to the seller. All these facilities are extended to buyer-firms as well, if asked for.

Commission Agents or Arhatias in unregulated markets are of two types, Kaccha arhatias and pacca arhatias. Kaccha arhatias primarily act for the sellers, including farmers. They sometimes provide advance money to farmers and itinerant traders on the condition that the produce will be disposed of through them. Kaccha arhatias charge arhat or commission in addition to the normal rate of interest on the money they

advance. A *pacca arhatia* acts on behalf of the traders in the consuming market. The processors (rice millers, oil millers and cotton or jute dealers) and big wholesalers in the consuming markets employ *pacca arhatias* as their agents for the purchase of a specified quantity of goods within a given price range. In regulated markets, only one category of commission agent exists under the name of “A” class trader. The commission agent keeps an establishment – a shop, a godown and a rest house for his clients. He renders all facilities to his clients. He is, therefore, preferred by the farmers to the co-operative marketing society for the purpose of the sale of the farmer’s produce. Commission agents extend the following facilities to their clients:

- They advance 40 to 50 percent of the expected value of the crop as a loan to farmers to enable them to meet their production expenses;
- They act as bankers of the farmers. They retain the sale proceeds, and pay to the farmers as and when the latter require the money;
- They offer advice to farmers for purchase of inputs and sale of products;
- They provide empty bags to enable the farmers to bring their produce to the market;
- They provide food and accommodation to the farmers and their animals when the latter come to the market for the sale of their produce;
- They provide storage facility and advance loans against the stored product up to 75 percent of its value;
- They arrange, if required by the farmer, for the transportation of the produce from the village to the market; and
- They help the farmers in times of personal difficulties.

Brokers: Brokers render personal services to their clients in the market; but unlike the commission agents, they do not have physical control of the product. The main function of a broker is to bring together buyers and sellers on the same platform for negotiations. Their charge is called brokerage. They may claim brokerage from the buyer, the seller or both, depending on the market situation and the service rendered. They render valuable service to the prospective buyers and sellers, for they have complete knowledge of the market – of the quantity available and the prevailing prices.

Brokers have no establishment in the market. They simply wander about in the market and render services to clients. There is no risk to them. They do not render any other service except to bring the buyers and sellers on the same platform. In most regulated markets, brokers do not play any role because goods are sold by open auction. Their number in food grain marketing trade is decreasing. But they still play a valuable role in the marketing of other agricultural commodities, such as gur, sugar, oil, cottonseed and chillies.

C. Speculative Middlemen

Those middlemen who take title to the product with a view to making a profit on it are called speculative middlemen. They are not regular buyers or sellers of produce. They specialize in risk – taking. They buy at low prices when arrivals are substantial and sell in the off – season when prices are high. They do the minimum handling of goods. They make profit from short-run as well as long-run price fluctuations.

Processors carry on their business either on their own or on custom basis. Some processors employ agents to buy for them in the producing areas, store the produce and process it throughout the year on continuous basis. They also engage in advertising activity to create a demand for their processed products.

D. Facilitative Middlemen

Some middlemen do not buy and sell directly but assist in the marketing process. Marketing can take place even if they are not active. But the efficiency of the system increases when they engage in business. These middlemen receive their income in the form of fees or service charges from those who use their services.

The important facilitative middlemen are:

Hamals or Labourers: They physically move the goods in marketplace. They do unloading from and the loading on to bullock carts or trucks. They assist in weighting the bags. They perform cleaning, sieving, and refilling jobs and stitch the bags. Hamals are the hub of the marketing wheel. Without their active co-operation, the marketing system would not function smoothly.

Weighmen: They facilitate the correct weighment of the produce. They use a pan balance when the quantity is small. Generally, the scalebeam balance is used. They get payment for their services through the commission agent. The weighbridge system of weighing also exists in big markets.

Graders: These middlemen sort out the product into different grades, based on some defined characteristics, and arrange them for sale. They facilitate the process of prices settlement between the buyer and the seller.

Transport Agency: This agency assists in the movement of the produce from one market to another. The main transport means are the railways and trucks. Bullock carts or camel carts or tractor trolleys are also used in villages for the transportation of food grains.

Communication Agency: It helps in the communication of the information about the prices prevailing, and quantity available, in the market. Sometimes, the transactions take place on the telephone. The post and telegraph, telephone, newspapers, the radio, Television, Internet and informal links are the main communication channels in agricultural marketing.

Advertising Agency: It enables prospective buyers to know the quality of the product and decide about the purchase of commodities. Newspapers, the radio, cinema slides, television and Internet are the main media for advertisements.

Auctioneers: They help in exchange function by putting the produce for auction and bidding by the buyers.

Lesson-30 Regulated Agricultural Markets**30.1 INTRODUCTION**

As seen in the previous chapter, there are numerous agents involved in marketing of agricultural products. Though they serve the very important purpose of moving agricultural produce from farmer to consumer, they are accused of amassing huge margin in the process. Government has to take into consider all the stakeholders in the process, viz, producers, consumers as well other market functionaries. Therefore, the government intervenes in the process of marketing through various ways. Forms of government intervention in agricultural marketing system consist of framing rules and regulation, promote infrastructure development, administration of prices and influence supply and demand. We will discuss these issues in this lesson.

30.2 ORGANISATIONS AIDING GOVERNMENT IN MARKET INTERVENTION

Though agricultural marketing is a State subject, the Government of India has an important role to play in laying down general policy framework, framing of quality standards, conducting survey and research studies and in providing guidance, technical and financial support to the State Governments. The Central Government is aided and advised by two organisations under its control, namely, the Directorate of Marketing and Inspection (DMI) and the National Institute of Agricultural Marketing (NIAM), Jaipur.

Directorate of Marketing and Inspection: It is an attached office of the Ministry and is headed by the Agricultural Marketing Adviser to the Government of India.

The main functions are;

- Rendering Advice on Statutory Regulation,
- Development and management of agricultural produce markets to the States/Union Territories;
- Promotion of grading and standardization of agricultural and allied products under the Agricultural Produce (Grading & Marketing) Act. 1937;
- Market Research, survey and Planning;
- Training of personnel in agricultural marketing;
- Administration of Cold Storage Order, 1980 (except regulatory functions) and
- Meat Food Products Order, 1973.

National Institute of Agricultural Marketing (NIAM) has started functioning at Jaipur (Rajasthan) with effect from 8th August, 1988. The objectives of NIAM are,

- To augment the agricultural marketing infrastructure of the country through programmes of teaching, research and consultancy services;
- To design and conduct training courses appropriate to the specific identified needs of the personnel and enterprises and institutions that they serve;
- To undertake research to demonstrate and replicate better management techniques in the field of agricultural marketing; to provide consultancy services for formulating investment projects and for problem solving advice; and
- To offer educational programmes in agricultural marketing for implementing the existing facilities.

30.3 REGULATED MARKET

Under the traditional system of marketing of the agricultural products, producer-sellers incurred a high marketing cost, and suffered from unauthorized deductions of marketing charges and the prevalence of various malpractices. To improve marketing conditions and with a view to creating fair competitive conditions, the increase in the bargaining power of producer-sellers was considered to be the most important prerequisite of orderly marketing. Most of the defects and malpractices under, the then existing marketing system of agricultural products have been more or less removed by the exercise of public control over markets, i.e., by the establishment of regulated markets in country.

Definition of regulated market

A regulated market is one which aims at the elimination of the unhealthy and unscrupulous practices, reducing marketing charges and providing facilities to producer-sellers in the market. Any legislative measure designed to regulate the marketing of agricultural produce in order to establish, improve and enforce standard marketing practices and charges may be termed as one which aims at the establishment of regulated markets. Regulated markets have been established by State Governments and rules and regulations have been framed for the conduct of their business. The establishment of regulated market is not intended at creating an alternative marketing system. The basic objective has been to create conditions for efficient performance of the private trade, through facilitating free and informal competition. In regulated markets, the farmer is able to sell his marketed surplus in the presence of several buyers through open and competitive bidding. The legislation for the establishment of regulated markets does not make it compulsory for the farmer to sell his produce in the regulated market make it compulsory for the farmer to sell his produce in the regulated market yard. Instead, voluntary action on the part of the farmers to take advantage of such a market is assumed. The basic philosophy of the establishment regulated markets is the elimination of malpractices in the system and assignment of dominating power to the farmers or their representatives in the function of the markets.

30.3.1 Objectives of regulated markets

The specific objectives of regulated markets are:

1. To prevent the exploitation of farmers by overcoming the handicaps in the marketing of their products

2. To make the marketing system most effective and efficient so that farmers may get better prices for their produce, and the goods are made available to consumers at reasonable prices
3. To provide incentive prices to farmers for inducing them to increase the production both in quantitative and qualitative terms and
4. To promote an orderly marketing of agricultural produce by improving the infrastructural facilities.

30.3.2 Important features of regulated markets

Under the provisions of the agricultural produce market act, the state government gives its intention to bring a particular area under regulation by notifying market areas, market yard, main assembling market and sub market yard, if any, under the principle regulated market. The meaning of these terms is explained in the following paragraph.

1. Market area: The area from which the produce naturally and abundantly flows to a commercial centre, i.e., the market, and which assures adequate business and income to the market committee

2. Principle assembling market: It is the main market which is declared as a principal market yard on the basis of transactions and income generated for the market committee

3. Sub market yard: It is sub yard of the principle assembling market. This is a small market and does not generate sufficient income to declare as a principal assembling market

4. Market yard: This is a specified portion of the market area where the sale, purchase, storage and processing of any of the specified agricultural commodities are carried out.

30.4 MODEL ACT: The State Agricultural Produce Marketing (Development & Regulation Act, 2003) 9th September 2003

Salient Features

1. The title of the Act is changed to highlight the objective of development of agricultural marketing in addition to its regulation under the Act. Accordingly, the Preamble of the Act is redrafted to provide for development of efficient marketing system, promotion of agri-processing and agricultural exports and to lay down procedures and systems for putting in place an effective infrastructure for the marketing of agricultural produce.
2. Legal persons, growers and local authorities are permitted to apply for the establishment of new markets for agricultural produce in any area. Under the existing law, markets are set up at the initiative of State Governments alone. Consequently, in a market area, more than one market can be established by private persons, farmers and consumers.
3. There will be no compulsion on the growers to sell their produce through existing markets administered by the Agricultural Produce Market Committee (APMC). However,

agriculturist who does not bring his produce to the market area for sale will not be eligible for election to the APMC.

4. Separate provision is made for notification of “Special Markets” or “Special Commodities Markets” in any market area for specified agricultural commodities to be operated in addition to existing markets.
5. The APMC have been made specifically responsible for:
 - Ensuring complete transparency in pricing system and transactions taking place in market area;
 - Providing market-led extension services to farmers;
 - Ensuring payment for agricultural produce sold by farmers on the same day;
 - Promoting agricultural processing including activities for value addition in agricultural produce
 - Publicizing data on arrivals and rates of agricultural produce brought into the market area for sale ; and
 - Setup and promote public private partnership in the management of agricultural markets.
6. Provision made for the appointment of Chief Executive Officer of the Market Committee from among the professionals drawn from open market.
7. A new Chapter on “Contract Farming” added to provide for compulsory registration of all contract farming sponsors, recording of contract farming agreements, resolution of disputes, if any, arising out of such agreement, exemption from levy of market fee on produce covered by contract farming agreements and to provide for indemnity to producers’ title/ possession over his land from any claim arising out of the agreement.
8. Model specification of contract farming agreements provided in the Addendum to the model law.
9. Provision made for direct sale of farm produce to contract farming sponsor from farmers’ field without the necessity of routing it through notified markets.
10. Provision made for imposition of single point levy of market fee on the sale of notified agricultural commodities in any market area and discretion provided to the State Government to fix graded levy of market fee on different types of sales.
11. Licensing of market functionaries is dispensed with and a time bound procedure for registration is laid down. Registration for market functionaries provided to operate in one or more than one market areas.
12. Commission agency in any transaction relating to notified agricultural produce involving an agriculturist is prohibited and there will be no deduction towards commission from the sale proceeds payable to agriculturist seller.
13. Provision made for the purchase of agricultural produce through private yards or directly from agriculturists in one or more than one market area.

14. Provision made for the establishment of consumers"/ farmers" market to facilitate direct sale of agricultural produce to consumers.
15. Provision made for resolving of disputes, if any, arising between private market/ consumer market and Market Committee.
16. State Governments conferred power to exempt any agricultural produce brought for sale in market area, from payment of market fee.
17. Market Committees permitted to use its funds among others to create facilities like grading, standardization and quality certification; to create infrastructure on its own or through public private partnership for post harvest handling of agricultural produce and development of modern marketing system.
18. For the Chairmanship of State Agricultural Marketing Board, two options provided namely Minister incharge of Agricultural Marketing as ex-officio or alternatively to be elected by the Chairman/ members of Market Committees.
19. Funds of the State Agricultural Marketing Board permitted to be utilized for promoting either on its own or through public private partnership, for the following:
 - (i) Setting up of a separate marketing extension cell in the Board to provide market-led extension services to farmers;
 - (ii) Promoting grading, standardization and quality certification of notified agricultural produce and for the purpose to set up a separate Agricultural Produce Marketing Standards Bureau.
20. The State Agricultural Marketing Board made specifically responsible for:
 - market survey, research, grading, standardization, quality certification, etc.;
 - Development of quality testing and communication infrastructure.
 - Development of media, cyber and long distance infrastructure relevant to marketing of agricultural and allied commodities

Lesson-31 Cooperative Agricultural Marketing**31.1 INTRODUCTION**

For a country like India having a very large population, the co-operative way of working in business and commercial activities is the only way of social upliftment. Prof. D. R. Gadgil said, “Though Co-operation has failed, Co-operation MUST Succeed”. The importance of this can be understood as “Agricultural cooperatives: key to feeding the world” was the 2012 World Food Day theme, in recognition of the role cooperatives play in improving food security and contributing to the eradication of hunger. In this lesson, we will discuss the meaning and objective of marketing cooperatives and the role of National Agricultural Cooperative Marketing Federation (NAFED)

31.2 COOPERATIVE MARKETING-MEANING

Cooperative marketing organizations are association of producers for the collective marketing of their produce and for securing for the members the advantages that result from large-scale business which an individual cultivator cannot secure because of his small marketable surplus.

In a co operative marketing society, the control of the organization is in the hands of the farmers, and each member has one vote irrespective of the number of shares purchased by him. The profit earned by the society is distributed among the members on the basis of the quantity of the produce marketed by him. In other words, co operative marketing societies are established for the purpose collectively marketing the products of the member farmers. It emphasizes the concept of commercialization. Its economic motives and character distinguish it from other associations. These societies resemble private business organization in the method of their operations: but they differ from the capitalistic system chiefly in their motives and organizations. An example of successful cooperative in India is dairy sector which has drawn worldwide accolades for its achievement.

31.3 FUNCTIONS

The main functions of co operative marketing societies are:

- To market the produce of the members of the society at fair prices;
- To safeguard the members for excessive marketing costs and malpractices;
- To make credit facilities available to the members against the security of the produce brought for sale;
- To make arrangements for the scientific storage of the members’ produce;
- To provide facilities of the grading and market information which may help them to get a good price for their produce

- To introduce the system of pooling so as to acquire a better bargaining power than the individual members having a small quantity of produce for marketing purposes;
- To act as an agent of the government for the procurement of food grains and for the implementation of the price support policy
- To arrange for the export of the produce of the members so that they may get better returns;
- To make arrangements for the transport of the produce of the members from the villages to the market on collective basis and bring about a reduction in the transportation; and
- To arrange for the supply of the inputs required by the farmers, such as improved seeds, fertilizers, insecticides and pesticides.

The **advantages that co-operative marketing** can confer on the farmer are multifarious, some of which are listed below.

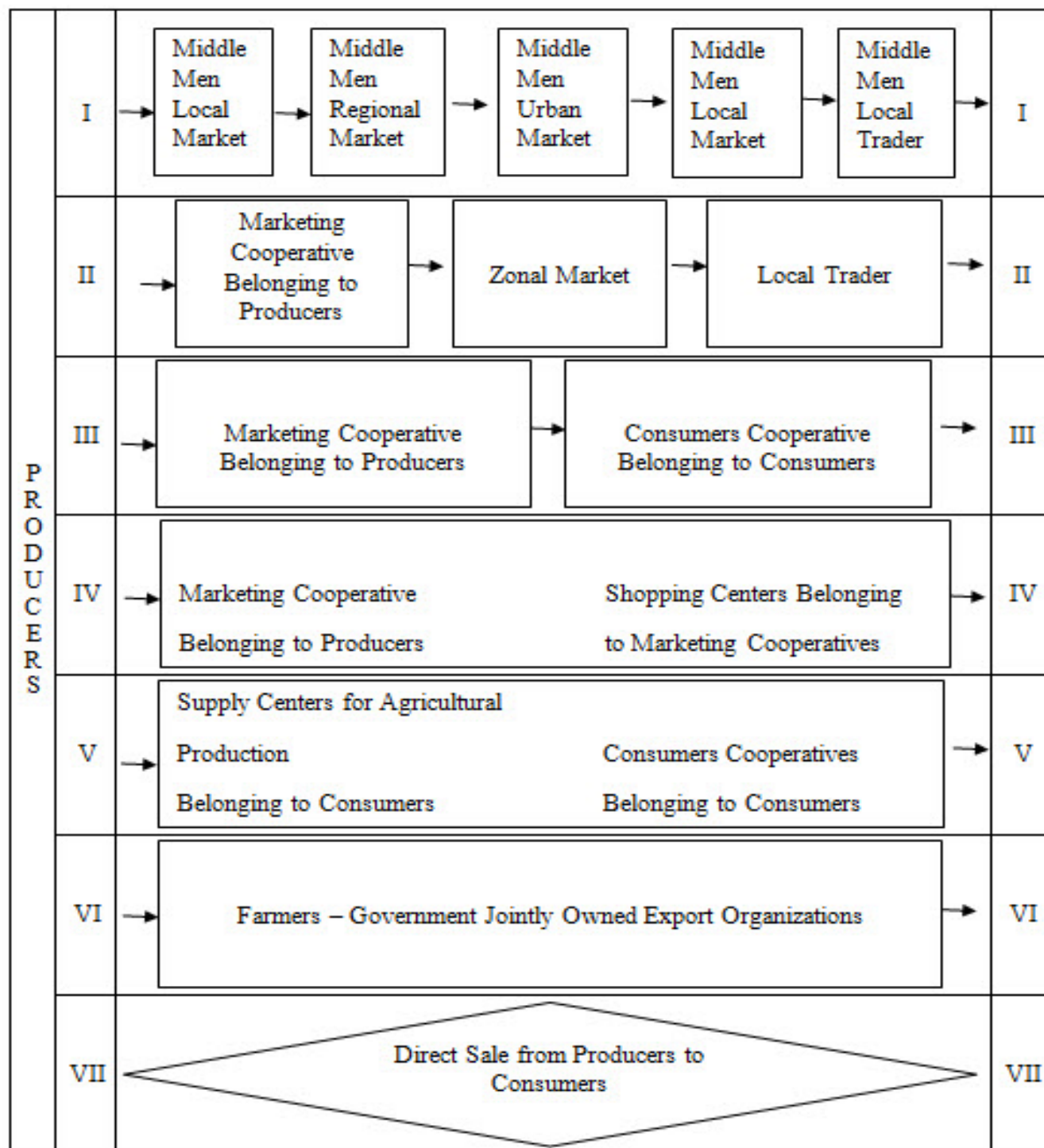
- **Increases bargaining strength of the farmers:** Many of the defects of the present agricultural marketing system arise because often one ignorant and illiterate farmer (as an individual) has to face well-organised mass of clever intermediaries. If the farmers join hands and form a co-operative, naturally they will be less prone to exploitation and malpractices. Instead of marketing their produce separately, they will market it together through one agency.
- **Direct dealing with final buyers:** The co-operatives can altogether skip the intermediaries and enter into direct relations with the final buyers. This practice will eliminate exploiters and ensure fair prices to both the producers and the consumers.
- **Provision of credit:** The marketing co-operative societies provide credit to the farmers to save them from the necessity of selling their produce immediately after harvesting. This ensures better returns to the farmers.
- **Easier and cheaper transport:** Bulk transport of agricultural produce by the societies is often easier and cheaper. Sometimes the societies have their own means of transport.
- **Storage facilities:** The co-operative marketing societies generally have storage facilities. Thus the farmers can wait for better prices.
- **Grading and standardization:** This task can be done more easily for a co-operative agency than for an individual farmer. For this purpose, they can seek assistance from the government or can even evolve their own grading arrangements.
- **Market intelligence:** The co-operatives can arrange to obtain data on market prices, demand and supply and other related information from the markets on a regular basis and can plan their activities accordingly.
- **Influencing marketing prices:** Wherever strong marketing co-operative are operative, they have bargained for and have achieved, better prices for their

agricultural produce.

- **Provision of inputs and consumer goods:** The co-operative marketing societies can easily arrange for bulk purchase of agricultural inputs, like seeds, manures fertilizers etc. and consumer goods at relatively lower price and can then distribute them to the members.
- **Processing of agricultural produce:** The co-operative societies can undertake processing activities like crushing seeds, ginning and pressing of cotton, etc. In addition to all these advantages, the co-operative marketing system can arouse the spirit of self-confidence and collective action in the farmers without which the programme of agricultural development, howsoever well conceived and implemented, holds no promise to success.

31.4 COOPERATIVE MARKETING MODELS:

Following is the schematic representation of different models of Marketing Cooperative



31.5 NATIONAL AGRICULTURAL COOPERATIVE MARKETING FEDERATION (NAFED)

Nafed is registered under the Multi State Co-operative Societies Act. Nafed was setup with the object to promote Co-operative marketing of Agricultural Produce to benefit the farmers. Agricultural farmers are the main members of Nafed, who have the authority to say in the form of members of the General Body in the working of Nafed.

Objectives

The objectives of the NAFED shall be

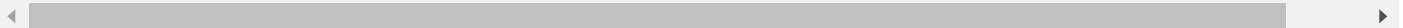
- To organise, promote and develop marketing, processing and storage of agricultural, horticultural and forest produce,
- To distribute agricultural machinery, implements and other inputs,
- Undertake inter-State, import and export trade, wholesale or retail as the case may be.
- To act and assist for technical advice in agricultural production for the promotion and the working of its members and cooperative marketing, processing and supply societies in India.

In furtherance of these objectives, the NAFED may undertake one or more of the following **functions/ activities**:

- To facilitate, coordinate and promote the marketing and trading activities of the cooperative institutions in agricultural and other commodities, articles and goods;
- To undertake or promote on its own or on behalf of its member Institutions or the Government or Government Organisations, Inter-State and international trade and commerce and undertake, wherever necessary, sale, purchase, import, export and distribution of agricultural commodities, horticultural and forest produce.
- To undertake purchase, sale and supply of agricultural products, marketing and processing requisites, such as manure, seeds, fertiliser, agricultural implements and machinery, packing machinery, construction requisites, processing machinery for agricultural commodities, forest produce, dairy, wool and other animal products;
- To act as warehouseman under the Warehousing Act and own and construct its own godowns and cold storages;
- To act as agent of any Government agency or cooperative institution, for the purchase, sale, storage and distribution of agricultural, horticultural, forest and animal husbandry produce, wool, agricultural requisites and other consumer goods;
- To act as insurance agent and to undertake all such work which is incidental to the same;
- To organise consultancy work in various fields for the benefit of the cooperative institutions in general and for its members in particular;
- To undertake manufacture of agricultural machinery and implements, processing, packing, etc. and other production requisites and consumer articles.
- To set up storage units for storing various commodities and goods, by itself or in collaboration with any other agency in India or abroad;
- To maintain transport units of its own or in collaboration with any other organisation in India or abroad for movement of goods on land, sea, air etc.;
- To collaborate with any international agency or a foreign body for development of cooperative marketing, processing and other activities for mutual advantage in India

or abroad;

- To undertake marketing research and dissemination of market intelligence;
- To subscribe to the share capital of other cooperative institutions as well as other public, joint and private sector enterprises if and when considered necessary for fulfilling the objectives of NAFED.
- To arrange for the training of employees of marketing/processing/supply cooperative societies;
- To maintain common cadres/pools of managerial/technical personnel required by the marketing/processing/supply cooperative societies;
- To establish processing units for processing of agricultural, horticultural and forest produce and wool;
- To undertake grading, packing and standardisation of agricultural produce and other articles;
- To acquire, take on lease or hire, lands, buildings, fixtures and vehicles and to sell, give on lease or hire them for the business of NAFED.
- To advance loans to its members and other cooperative institutions on the security of goods or otherwise;
- To guarantee loans or advances or give undertakings to any Society or Company in which the Federation has a shareholding or financial involvement as a promoter to be able to assist its development or expansion or for starting any industrial undertaking by such societies/companies;
- To guarantee loans or advances or give undertakings on behalf of any such society or company as mentioned above to any financing institutions;
- To do all such things or undertake such other business or activities as may be incidental or conducive to the attainment of any or all of the above objects.



Lesson-32 Producer Surplus of Agricultural Commodities

32.1 INTRODUCTION

Unlike in other sector, everything produced by the farmer in his field is not sold to consumer. In most of the agricultural commodities, quantity marketed is different from the quantity produced. A farmer sells the produce after meeting his various requirements. In this chapter we will be discussing the meaning of producer surplus, factors affecting the producer surplus.

32.2 MEANING OF PRODUCERS SURPLUS

In any developing economy, the producer's surplus of agricultural product plays a significant role. This is the quantity which is actually made available to the nonproducing population of the country. From the marketing point of view, this surplus is more important than the total production of commodities. The arrangements for marketing and the expansion of markets have to be made only for the surplus quantity available with the farmers and not for the total production.

The rate at which agricultural production expands determines the pace of agricultural development, while the growth in the marketable surplus determines the pace of economic development. An increase in production must be accompanied by an increase in the marketable surplus for the economic development of the country. Though the marketing system is more concerned with the surplus which enters or is likely to enter the market, the quantum of total production is essential for this surplus. The larger the production of a commodity, the greater will be the surplus of that commodity and vice versa.

The commodity, the marketed and marketable surplus helps the policy-makers as well as the traders in the following areas.

- **Framing Sound Price Policies:** Price support programmes are an integral part of agricultural policies necessary for stimulating agricultural production. The knowledge of quantum of marketable surplus helps in framing these policies.
- **Developing Proper Procurement and Purchase Strategies:** The procurement policy for feeding the public distribution system has to take into account the quantum and behaviour of marketable and marketed surplus. Similarly, the traders, processors and exporters have to decide their purchase strategies on the basis of marketed quantities.
- **Checking Undue Price Fluctuations :** A knowledge of the magnitude and extent of the surplus helps in the minimization of price fluctuations in agricultural commodities because it enables the government and the traders to make proper arrangements for the movement of produce from one area, where they are in surplus, to another area which is deficient.

- Advanced estimates of the surpluses of such commodities which have the potential of external trade are useful in decisions related to the export and import of the commodity. If surplus is expected to be less than what is necessary, the country can plan for imports and if surplus is expected to be more than what is necessary, avenues for exporting such a surplus can be explored.
- Development of Transport and Storage System: The knowledge of marketed surplus helps in developing adequate capacity of transport and storage system to handle it.

32.3 TYPES OF PRODUCERS SURPLUS

The producer surplus is the quantity of produce which is or can be made available by the farmers to the non-farm population. The producers' surplus is of two types.

1. Marketable Surplus

The marketable surplus is that quantity of the produce which can be made available to the non-farm population of the country. It is a theoretical concept of surplus. The marketable surplus is the residual left with the producers farmers after meeting his requirement for family consumption, farm needs for seeds and feed for cattle, payment to labour in kind, payment to artisans, blacksmith, potter and mechanic payment to landlord as rent and social and religious payments in kind. This may be expressed as follows:

$$MS = P - C$$

where

MS = Marketable surplus

P = Total production, and

C = Total requirements (family consumption, farm needs, payment to labour, artisans, landlord and payment for social and religious work)

2. Marketed Surplus

Marketed surplus is that quantity of the produce which the producer farmer actually sells in the market, irrespective of the requirements for family consumption, farm needs and other payments. The marketed surplus may be more, less or equal to the marketable surplus.

Whether the marketed surplus increases with the increase in production has been under continual theoretical security. It has been argued that poor and subsistence farmers sell that part of the produce which is necessary to enable them to meet their cash obligations. This results in distress sale on some farms. In such a situation any increase in the production of marginal and small farms should first result in increased on-farm consumption.

An increase in the real income of farmers also has a positive effect on on-farm consumption because of positive income of farmers also has a positive effect on on-farm

consumption because of positive income elasticity. Since the contribution of this group to the total marketed quantity is not substantial the overall effect of increase in production must lead to an increase in the marketed surplus.

32.4 RELATIONSHIP BETWEEN MARKETED SURPLUS AND MARKETABLE SURPLUS

The marketed surplus may be more, less or equal to the marketable surplus, depending upon the condition of the farmer and type of the crop. The relationship between the two terms may be stated as follows.

>

Marketed surplus < surplus

=

1. The marketed surplus is more than the marketable surplus when the farmer retains a smaller quantity of the crop than his actual requirements for family and farm needs. This is true especially for small and marginal farmers, whose need for cash is more pressing and immediate. This situation of selling more than the marketable surplus is termed as distress or forced sale. Such farmers generally buy the produce from the market in a later period to meet their family and/or farm requirements. The quantity of distress sale increased with the fall in the price of the product. A lower price means that a larger quantity will be sold to meet some fixed cash requirements.

2. The marketed surplus is less than the marketable surplus when the farmers retain some of the surplus produce. This situation holds true under the following conditions.

- Large farmers generally sell less than the marketable surplus because of their better retention capacity. They retain extra produce in the hope that they would get a higher price in the later period. Sometimes, farmers retain the produce even up to the next production season.
- Farmers may substitute one crop for another crop either for family consumption purpose or for feeding their livestock because of the variation in prices. With the fall in the price of the crop relative to a competing crop, the farmers may consume more of the first and less of the second crop.

3. The marketed surplus may be equal to the marketable surplus when the farmer neither retains more nor less than his requirement. This holds true for perishable commodities and of the average farmer.

32.5 FACTORS AFFECTING MARKETABLE SURPLUS

The marketable surplus differs from region to region and within the same region, from crop to crop. It also varies from farm to farm. On a particular farm, the quantity of marketable surplus depends on the following factors.

- **Size of holding:** There is positive relationship between the size of the holding and the marketable surplus.

- **Production:** The higher the production on a farm, the larger will be the marketable surplus and vice versa.
- **Price of the Commodity:** The price of the commodity and the marketable surplus have a positive as well as a negative relationship, depending upon whether one considers the short and long run or the micro and macro levels.
- **Size of family:** The larger the number of members in a family the smaller the surplus on the farm.
- **Requirement of Seed and Feed:** The higher the requirement for these uses, the smaller the marketable surplus of the crop.
- **Nature of Commodity:** The marketable surplus of non-food crops is generally higher than that for food crops. For example, in the case of cotton, jute and rubber, the quantity retained for family consumption is either negligible or very small part of the total output. For these crops, a very large proportion of total output is marketable surplus. Even among food crops, for such commodities like sugarcane, spices and oilseeds which require some processing before final consumption the marketable surplus as a proportion of total output is larger than that for other food crops.
- **Consumption Habits:** The quantity of output retained by the farm family depends on the consumption habits, for example, in Punjab, rice forms a relatively small production of total cereals consumed by farm-families compared to those in southern or eastern states. Therefore, out of a given output of paddy/rice, Punjab farmers sell a greater proportion than that sold by rice eating farmers of other states. The functional relationship between the marketed surplus of a crop and factors affecting the marketed surplus may be expressed as :

$$M = f(x_1, x_2, x_3, \dots)$$

Where

M = Total marketed surplus of a crop in quintals

x_1 = Size of holding in hectares

x_2 = Size of family in adult units

x_3 = Total production of the crop in quintals

x_4 = Price of the crop

the other factors may be specified..

32.6 RELATIONSHIP BETWEEN PRICES AND MARKETABLE SURPLUS

Two main hypotheses have been advanced to explain the relationship between prices and the marketable surplus of foodgrains.

- **INVERSE RELATIONSHIP:** There is an inverse relationship between prices and the marketable surplus. This hypothesis was presented by P.N. Mathur and M. Ezetkiel. They postulate that the farmers' cash requirements are nearly fixed and given the price level, the marketed portion of the output is determined. This implies that the farmers' consumption is a residual and that the marketed surplus is inversely proportional to the price level. This behaviour assumes that farmers have inelastic cash requirements. The argument is that, in the poor economy of underdeveloped countries farmers sell that quantity of the output which gives them the amount of money they need to satisfy their cash requirements ; they retain the balance of output for their own consumption purpose. With a rise in the prices of foodgrains, they sell a smaller quantity of foodgrains to get the cash they need and vice versa. In other words, with a rise in price, farmers sell a smaller, and with the fall in price they sell a larger quantity. Olson and Krishnan have argued that the marketed surplus varies inversely with the market price. They contend that a higher price for a subsistence crop may increase the producers' real income sufficiently to ensure that the income effect on demand for the consumption of the crop outweighs the price effect on production and consumption.
- **POSITIVE RELATIONSHIP:** V.M. Dandekar and Rajkrishna put forward the case of a positive relationship between prices and the marketed surplus of foodgrains in India. This relationship is based on the assumption that farmers are price conscious. With a rise in the prices of foodgrains, farmers are tempted to sell more and retain less. As a result, there is increased surplus. The converse, too, holds true.

Lesson-33 Market Integration and Marketing Efficiency

33.1 INTRODUCTION

It is important to understand how the different activities of marketing are controlled by different firms. This will give the idea of completion in the market. It is equally important to know how efficient the different marketing channels are. In this lesson we will be studying the meaning of market integration, types of market integration and market efficiency.

33.2 MARKET INTEGRATION

Kohis and Uhl have defined “Market integration as process which refers to the expansion of firms by consolidating additional marketing functions and activities under a single management”.

Types of market integration:

There are mainly three types of integration viz, horizontal integration, vertical integration and conglomeration which are discussed below.

1. Horizontal integration:

- When a firm gains control over other firms, performing similar marketing functions. Some marketing agencies (say, sellers) combine to form a union with a view to reducing their effective number and the extent of competition in the market.
- Horizontal integration is advantageous for the members who join the group.
- If farmers join hands and form cooperatives, they are able to sell their produce in bulk and reduce their cost of marketing.

The purpose of horizontal integration is to

- Grow the company in size,
- Increase product differentiation,
- Achieve economies of scale,
- Reduce competition or access new markets.

When many firms pursue this strategy in the same industry, it leads to **industry consolidation** (oligopoly or even monopoly).

2. Vertical integration:

Vertical integration occurs when a single firm can produce complementary products and services more profitably than a number of firms. Activities are complementary when

carrying out one activity reduces the cost of doing the other. Put somewhat differently, vertical integration refers to the common organization of an industry across a number of components of the value chain and to increased standardization of production at each stage of the production process. Maturing firms in a vertically integrated industry are likely under certain conditions to try to control more parts of the production process. There are three levels of integration. These are:

- Non-integrated - firms tend to act as individual business units. Non-integrated industries are likely to be found in developing countries. A small subsistence farm producing food only for the needs of the farm household would be an example of a non-integrated firm.
- Semi-integrated - involves the processor taking over some parts of the production process to control the quality and quantity of output. In the broiler industry, the firm rearing the poultry may be involved in the production of parent stock or in running the hatchery operation.
- Integrated - large corporate entities control all levels of the value chain from feed milling to delivery at the retail level. Firms involved in pig meat production might own the feed mills used to manufacture the animal feed; they might also be involved in the breeding of pigs for the fattening operation; these firms might also own the slaughtering facilities and retail outlets to sell the product.

There are two types of vertical integration

- Forward integration: Eg: Wholesaler assuming the function of retailing i.e. assuming another function.
- Backward Integration: Eg: Processing firm assumes the function of assembling / purchasing the produce from villages.

Examples of vertical integration:

- Suguna Group, India's largest poultry enterprise, launched its outlet of a chain of quality chicken retail stores under the brand name Suguna Daily Fresh.
- VKS FARMS PVT LTD, the company owns a full value chain that starts from parent breeders, hatcheries, and commercial broiler farms, feed mills, chicken processing plant and retail chain outlets
- VENKY'S (INDIA) LIMITED, Venky's (India) Limited sells its processed and further processed chicken under the brand name Venky's. It is a preferred supplier to the Indian outlets of McDonalds, KFC, Pizza Hut, and Domino's
- Partnership between Monsanto and Cargill, "which controls seeds, fertilizers, pesticides, farm finance, grain collection, grain processing, livestock feed processing, livestock production, and slaughtering, as well as some well-known food brands.

Purpose for vertical integration

- Reduction of transaction costs
- Reduction in completion
- Market ownership and margin control

3. Conglomeration:

A combination of agencies or activities not directly related to each other, may when it operates under a united management, be termed a conglomeration.

Eg: Hindustan Lever Ltd. Delhi cloth and General mill (cloth & vanaspati).

33.3 MARKETING EFFICIENCY

Marketing efficiency is essentially the degree of market performance. It is a broad and dynamic concept.

Definition: It is the ratio of market output (satisfaction) to marketing input (cost of resources). An increase in ratio represents improved efficiency and vice versa.

Components of marketing efficiency

1. Effectiveness with which a marketing service is performed.
2. The cost at which the service is provided.
3. The effect of this cost and the method of performing the service as production and consumption. i.e. effect of (1) & (2), last two are more important.

Assessment of marketing efficiency:

1. Technical or Physical or Operational efficiency: It pertains to the cost of performing a function; Efficiency is increased when the cost of performing a function per unit of output is reduced.

Eg: - Storage processing, handling etc.

2. Pricing / Allocative efficiency : System is able to allocate farm products either over time, across the space or among the traders, processors and consumers at a point of time in such a way that no other allocation would make producers and consumers better off. This is achieved via pricing the product at different stages, places, times, among different users. Pricing efficiency refers to the structural characteristics of the marketing system, when the sellers are able to get the true value of their produce and the consumers receive true worth of their money.

The above two types are mutually reinforcing in the long run.

Empirical Assessment of Marketing Efficiency:

A reduction in the cost for the same level of satisfaction or an increase in the satisfaction at a given cost results in the improvement in efficiency. (Khol and Uhl.)

$$E = \frac{O}{I} \times 100$$

I

E = level of efficiency

O = value added to the marketing system.

I = real cost of marketing

Shepherd's formula of marketing efficiency :

V

$$ME = \frac{V - I}{V} \times 100$$

I

ME = Index of marketing efficiency

V = Value of the goods sold or price paid by the consumer (Retail price)

I = Total marketing cost or input of marketing.

This method eliminates the problem of measurement of value added.

Lesson-34 Marketing cost-margins-price spreads

34.1 INTRODUCTION

Marketing is the process involves cost, and margin at different levels of marketing and therefore, the price spread from producer to consumer. The understanding of these concepts is necessary to choose the channels in marketing of agricultural product. These concepts are discussed in the present lesson.

34.2 MARKET MARGINS

Margin refers to the difference between the price paid and received by a specific marketing agency, such as a single retailer, or by any type of marketing agency such as retailers or assemblers or by any combination of marketing agencies such as the marketing system as a whole.

Absolute margin is expressed in rupees. A percentage margin is the absolute difference in price (absolute margin) divided by the selling price. Mark-up is the absolute margin divided by the buying price or price paid.

- **Marketing margin of a Middleman:** There alternative measures may be used. The three alternative measures which may be used in estimating market margins are.

(a) Absolute margin of ith middlemen (A_{mi})

$$= P_{Ri} - P_{Pi} - C_{mi}$$

(b) Percentage margin of ith middlemen (P_{mi})

$$\frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Ri}} \times 100$$

(c) Mark-up of ith middleman (M_2)

$$\frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Pi}} \times 100$$

Where,

P_{Ri} = Total value of receipts per unit (sale price)

P_{Pi} = Purchase value of goods per unit (purchase price)

C_{mi} = Cost incurred on marketing per unit.

The margin includes profit to the middlemen and returns to storage, interest on capital, overheads and establishment expenditure.

Sum of Average Gross margins method:

The average gross margins of all the intermediaries are added to obtain the total marketing margin as well as the breakup of the consumers rupee :

$$MT = \sum_{i=1}^n \frac{S_i - P_i}{Q_i}$$

MT = Total marketing margin.

S_i = Sale value of a product for i th firm

P_i = value paid by the i th firm

Q_i = Quantity of the product handled by its firm

$i = 1, 2, \dots, n$ (No. of firms involved in the marketing channel).

• Concepts of Marketing Margins:

- Complex because it is difficult to follow the path of the channel for a given quantity of the channel for a given quantity of the commodity.
- It is still difficult to estimate in respect of commodities subjected to processing.

Two methods are identified:

1. Concurrent margin method:

This method stresses on the difference in price that prevails for a commodity at successive stages of marketing at a given point of time.

2. Lagged Margin Method:

This method takes into account the time that elapses between buying and selling of a commodity by the intermediaries and also between the farmer and the ultimate consumer.

Lagged margin indicates the difference of price received by an agency and the one paid by the same agency in purchasing in equivalent quantity of commodity.

34.3 PRICE SPREAD

- The difference between the price paid by the consumer and price received by the farmer.
- It involves various costs incurred by various intermediaries and their margins.
- Marketing costs are the actual expenses required in bringing goods and services from the Producer to the consumer.

34.4 MARKETING COSTS

The movement of products from the producers to the ultimate consumers involves costs, taxes, and cess which is called marketing costs. These costs vary with the channels through which a particular commodity passes through. Eg: - Cost of packing, transport, weighment, loading, unloading, losses and spoilages.

• **Marketing costs would normally include:**

- Handling charges at local point
- Assembling charges
- Transport and storage costs
- Handling by wholesaler and retailer charges to customers
- Expenses on secondary service like financing, risk taking and market intelligence
- Profit margins taken out by different agencies.
- Producer's share in consumer's rupee :

PF

$P_s = \frac{PF}{Pr} \times 100$

Pr

Where,

P_s = Producer's share

PF = Price received by the farmer

Pr = Retail price paid by the consumer

Total cost of marketing of commodity,

$C = C_f + C_{m1} + C_{m2} + \dots + C_{mn}$

Where, C= Total cost of marketing of the commodity

C_f = Cost paid by the producer from the time the produce leaves till he sells it

C_{mi} = Cost incurred by the i th middlemen in the process of buying and selling the products.

34.4.1 OBJECTIVES OF STUDYING MARKETING COSTS

1. To ascertain which intermediaries are involved between producer and consumer.
2. To ascertain the total cost of marketing process of commodity.
3. To compare the price paid by the consumer with the price received by the producer.
4. To see whether there is any alternative to reduce the cost of marketing.

34.4.2 REASONS FOR HIGH MARKETING COSTS

1. High transportation costs
2. Consumption pattern – Bulk transport to deficit areas.
3. Lack of storage facilities.
4. Bulkiness of the produce.
5. Volume of the products handled.
6. Absence of facilities for grading.
7. Perishable nature of the produce.
8. Costly and inadequate finance.
9. Seasonal supply.
10. Unfair trade practices.
11. Business losses.
12. Production in anticipation of demand and high prices.
13. Cost of risk.
14. Sales service.

34.4.3 FACTORS AFFECTING MARKETING COSTS

1. Perish ability
2. Losses in storage and transportation
3. Volume of the product handled
Volume of the More – less cost
Volume of the Less – more cost
4. Regularity in supply : Costless irregular in supply – cost is more
5. Packaging : Costly (depends on the type of packing)
6. Extent of adoption of grading
7. Necessity of demand creation (advertisement)
8. Bulkiness
9. Need for retailing : (more retailing – more costly)
10. Necessity of storage
11. Extent of Risk

12. Facilities extended by dealers to consumers. (Return facility, home delivery, credit facility, entertainment)

34.4.4 WAYS OF REDUCING MARKETING COSTS OF FARM PRODUCTS

1. Increased efficiency in a wide range of activities between produces and consumers such as increasing the volume of business, improved handling methods in pre-packing, storage and transportation, adopting new managerial techniques and changes in marketing practices such as value addition, retailing etc.
2. Reducing profits in marketing at various stages.
3. Reducing the risks adopting hedging.
4. Improvements in marketing intelligence.
5. Increasing the competition in marketing of farm products.

Lesson-35 Food Processing Sector in India**35.1 INTRODUCTION**

Processing is an important marketing function in the present-day marketing of agricultural commodities. A little more than 100 years ago, it was a relatively unimportant function in marketing. A large proportion of farm products were sold in an unprocessed form and a great deal of the processing was done by the consumers themselves. Contribution of FPI sector has increased to Rs. 66,078 crore in 2009-10 from Rs. 47,689 crore in 2005-06 with CAGR of 8.49%. CAGR for total manufacturing sector during the same period has been 9.35%. At present, consumers are dependent upon processing for most of their requirements. Many technological changes have occurred in the recent past, such as the introduction of refrigeration, modern methods of milling and baking food grains, new processing methods for dairy products, and modern methods of packing and preservation. These technological changes have had a significant impact on the standard of living of the consumers, on the economic and social organizations of society, and on the growth of trade in the country.

35.2 MEANING & ADVANTAGES OF PROCESSING

The processing activity involves a change in the form of the commodity. This function includes all of those essentially manufacturing activities which change the basic form of the product. Processing converts the raw material and brings the products nearer to human consumption. It is concerned with the addition of value to the product by changing its form.

Advantages:

The processing of agricultural products is essential because very few farm products –milk, eggs, fruits and vegetables – are consumed directly in the form in which they are obtained by the producer – farmer. All other products have to be processed into a consumable form. Processing is important, both for the producer – sellers and for consumers. It increases the total revenue of the producer by regulating the supply against the prevailing demand. It makes it possible for the consumer to have articles in the form liked by him. The specific advantages of the processing function are:

- It changes raw food and other farm products into edible, usable and palatable forms. The value added by processing to the total value produced at the farm level varies from product to product. It is nearly 7 percent for rice and wheat, about 79 percent for cotton and 86 percent for tea. It is generally higher for commercial crops than for food crops. Examples of the products in this group are: the processing of sugarcane to make sugar, gur, khandsari; oilseeds processing to make oil; grinding of food grains to make flour; processing of paddy into rice; and conversion of raw mango into pickles.

- The processing function makes it possible for us to store perishable and semi – perishable agricultural commodities which otherwise would be wasted and facilitates the use of the surplus produce of one season in another season or year. Examples of the processing of the products in this group are: drying, canning and pickling of fruits and vegetables, frozen goods, conversion of milk into butter, ghee and cheese and curing of meat with salting / smoking.
- The processing activity generates employment. The baking industry, the canning industry, the brewing and distilling industry, the confectionary industry, the sugar industry, oil mills and rice mills provide employment to a large section of society.
- Processing satisfies the needs of consumers at a lower cost. If it is done at the door of the consumer, it is more costly than if it is done by a firm on large scale. Processing saves the time of the consumers and relieves them of the difficulties experienced in processing.
- Processing serves as an adjunct to other marketing functions, such as transportation, storage and merchandising.
- Processing widens the market. Processed products can be taken to distant and overseas markets at a lower cost.

35.3 PERFORMANCE OF FOOD PROCESSING SECTOR

The ministry of Food Processing, Government of India indicates the following segments within the Food Processing industry:

1. Dairy, Fruits & vegetable processing
2. Grain processing
3. Meat & poultry processing
4. Fisheries
5. Consumer foods including packaged foods, beverages and packaged drinking water

Though the industry is large in size, it is still at a nascent stage in terms of development of the country's total agriculture and food produce, only 2% is processed.

1. **Dairy:** In the dairy sector, most of the processing is done by the unorganized sector. Though the share of organized sector is less than 15%, it is expected to rise rapidly, especially in the urban regions. Among the milk products manufactured by the organized sector, some of the prominent ones are ghee, butter, cheese, ice cream, milk powders, malted milk food, condensed milk and infant foods.
2. **Fruits and vegetables:** Fruits and vegetables processing in India is almost equally divided between the organized and unorganized sectors, with the organized sector holding 48% of the share. While products like juices and pulp concentrate are largely manufactured by the organized sector, the unorganized sector's foothold is in the traditional areas of processed items like pickles, sauces and squashes.

Most of the units engaged in above are currently export oriented. Domestic consumption of processed fruits and vegetable products is low, indicating a potential for growth through increased penetration of the domestic market.

1. **Grains:** India produces more than 200 million tones of different food grains every year. The major grains such as rice, wheat, barley, and millets like jowar, bajra, and ragi are produced in the country. About 15% of annual production of wheat is converted into wheat products. Primary milling of rice, wheat and pulses is the most important activity in food grains processing.
2. **Meat and poultry:** India has a livestock population of 470 million, which includes 205 million cattle and 90 million buffaloes. Processing of meat products is licensed under Meat Food Products Order , (MFPO), 1973. Total meat production in the country is currently estimated at 5 million tonnes annually. Only about 1-2 % of the total meat is converted into value added products. Poultry processing is also at a nascent stage. The country produces about 450 million broilers and 33 billion eggs annually. Growth rate of egg and broiler production is 16.5 and 20 % respectively. Most of the production of meat and meat products continues to be in the unorganized sector. Some branded products like Venky's and Godrej's Real Chicken are, however, becoming popular in the domestic market.
3. **Fish Processing:** India is the third fish producer in the world and is second in inland fish production. The fisheries sector contributes US \$ 4.4 billion to the national income, which is about 1.4 % of the total GDP. With its over 8,000 km of coastline, 3 million hectares of reservoirs, 1.4 million hectares of brackish water, 50600 sq km of continental shelf area and 2.2 million sq km of exclusive economic zone, India is endowed with rich fishery resources and has vast potential for fishes from both inland and marine resources. It is widely felt that India's substantial fishery resources are underutilized and there is tremendous potential to increase the output of this sector.
4. **Consumer Foods:** consumer food industry includes packaged foods, aerated soft drinks, packaged drinking water and alcoholic beverages.

Packaged or Convenience Foods: This segment comprises bakery products, ready to eat snacks, chips, namkeens (salted snacks and savouries) and other processed foods/ snack foods. Other products like bread, chocolate are also growing at a significant rate. There is a demand for Indian snack food (Ready-To-eat) in overseas markets.

Aerated Soft Drinks: Two of the biggest global brands in this segment are well established in India. Soft drinks constitute the third largest packaged foods segment, after packed tea and packed biscuits. Penetration levels of aerated soft drinks in India are quite low compared to other developing and developed markets, an indication of further potential for rapid growth.

Packaged Drinking Water: Trends such as shortage of drinking water in the large metropolitan cities, changes in consumer lifestyles leading to demand for convenience and availability of various packaged sizes to suit different needs have led to a spurt in growth and these trends are expected to continue to fuel demand in this sector.

Alcoholic Beverages: India is the third largest market for alcoholic beverages in the world. The demand for spirits and beer is estimated to be around 373 million cases per annum. There are 12 joint venture companies producing grain based alcoholic beverages that have a combined licensed capacity of 3.9 million litres per annum. 56 units are engaged in manufacturing beer under license from the Government of India.

35.4 GROWTH DRIVERS OF FOOD PROCESSING SECTOR

1. Vast source of raw material

- India is one of the largest producers of wheat and rice.
- Coconuts, cashew nuts, ginger, turmeric and black pepper is widely grown in some parts of the country.
- India is the second largest producer of groundnuts, fruits and vegetables. That it accounts for about 10 per cent of the world's fruits production with the country topping in the production of mangoes and bananas.
- Due to the high processing levels milk products offer a significant opportunity in India. India is the world's largest producer of milk owing to the strong business models formed through cooperative movements in the country. Milk and related products account for 17% of India's total expenditure on food. This segment enjoys liberal regulations as all milk products except malted foods are automatically allowed 51% foreign equity participation and all exports of dairy products are freely allowed.
- Alcoholic beverages have been categorised as the new high opportunity sector in India. Liquor manufactured in India is categorised as Indian Made Foreign Liquor (IMFL). The sector is still barred from the import of potable alcohol as it is subject to government licensing. In the meanwhile, India has recently started producing wine for domestic consumption.
- Meat and poultry has also gained popularity due to the emergence of producers that have integrated breeding, feed milling, contract growing and marketing facilities for improved productivity. Meat, fish, and poultry are in rural areas as they are easily affordable and provide necessary nutrients. India has the potential to be a leading global food supplier if it employs the right marketing strategies and creates an efficient supply chain

2. Conventional farming to commercial farming

In recent years, there has been a shift from conventional farming of food grains to horticulture which include fruits, vegetables, ornamental crops, medicinal and aromatic plants, spices, plantation crops which include coconut, cashew nuts and cocoa and allied activities

3. Market in the form of large urban middle class

With a huge population of 1.08 billion and population growth of about 1.6 % per annum, India is a large and growing market for food products. Its 350 million strong urban

middle class with its changing food habits poses a huge market for agricultural products and processed food.

4. Low Production cost

The relatively low-cost but skilled workforce can be effectively utilized to set up large, low-cost production bases for domestic and export markets.

5. Change in consumption patterns

Increasing incomes are always accompanied by a change in the food habits. Over the last three decades in India a shift in food habits have been observed. The report observes that the proportionate expenditure on cereals, pulses, edible oil, sugar, salt and spices declines as households climb the expenditure classes in urban India while the opposite happens in the case of milk and milk products, meat, egg and fish, fruits and beverages.

For instance, According to report of ICRA the proportionate expenditure on staples like cereals, grams and pulses declined from 45 per cent to 44 per cent in rural India while the figure settled at 32 per cent of the total expenditure on food in urban India.

A large part of this shift in consumption is driven by the processed food market, which accounts for 32 per cent of the total food market. It accounts for US\$ 29.4 billion, in a total estimated market of US\$ 91.66 billion. The food processing industry is one of the largest industries in India -- it is ranked fifth in terms of production, consumption, export and expected growth.

According to the Confederation of Indian Industry (CII) the food-processing sector has the potential of attracting US\$ 33 billion of investment in 10 years and generates employment of 9 million person-days.

6. Government Assistance

The Government has introduced several schemes to provide financial assistance for setting up and modernizing of food processing units, creation of infrastructure, support for research and development and human resource development in addition to other promotional measures to encourage the growth of the processed food sector.

7. Foreign Direct Investment

Foreign direct investment (FDI) in the country's food sector is poised to hit the US\$ 3-billion mark in coming years. FDI approvals in food processing have doubled in last one year alone. The cumulative FDI inflow in food processing reached US\$ 2,804 million in March '06. In '05-06, the sector received approvals worth US\$ 41 million. This figure is almost double the US\$ 22 million approved in 2004-05.

The US-based private equity fund, New Vernon Private Equity Limited (NVPEL), has decided to invest Rs 45 crore in Kochi-based spice major, Eastern Condiments, which is the flagship company of Eastern Group. America's largest chocolate and confectionery-maker Hershey is acquiring 51 per cent stake in Godrej Beverages and Foods for US\$ 54 million.

8. Food Parks

In an effort to boost the food sector, the Government is working on agri zones and the concept of mega food parks. Twenty such mega parks will come are proposed across the country in various cities to attract Foreign Direct Investment (FDI) in the food-processing sector.

The Government has released a total assistance of US\$ 23 million to implement the Food Parks Scheme. It has so far approved 50 food parks for assistance across the country. The Centre also plans US\$ 22 billion subsidy for mega food processing parks.

Lesson-36 Meaning and Concept of International Business**36.1 INTRODUCTION**

Business is defined as a set of activities relating to industry and commerce. When these activities are carried across the political borders of a country, it is termed as international business. The objective, functions, processes and techniques are essentially the same whether a company is engaged in domestic business or international business. While the objective of both domestic business and international business is making profit through customer satisfaction and social welfare, what makes the latter type of business different from the former type is the likely differences in environmental factors in the overseas countries as compared to those the firm's own country. While doing business within one's own country, one is generally familiar with most of the environmental factors and is able to cope with them. But the task of managing international business may not be that easy, because operating in the environments which are different from the domestic environment calls for extra vigilance and the company has to adopt its strategies for business success.

36.2 CONCEPT OF INTERNATIONAL BUSINESS

International business implies conduct of business activities beyond the national boundaries. It is a wider term comprising of all the commercial transactions taking place between two countries. These transactions, including sales, investment and transportation may take place by government or private companies with or without an objective to make profit¹.

Some of the widely used terms in this context are explained below.

International Trade: It refers to exports and imports of goods and services by a firm to a foreign-based buyer (importer) or from a seller (exporter).

Import: It is buying goods or services by a home country from foreign country

Export: It is selling goods or services from home country to foreign country

The buyer of such goods and services is referred to an "importer" who is based in the country of import whereas the overseas based seller is referred to as an "exporter". Import in the receiving country is the export to the sending country.

Terms of Trade: It refers to the relative price of exports in terms of imports and is defined as the ratio of export prices to import prices. It can be interpreted as the amount of import goods an economy can purchase per unit of export goods. An improvement of a nation's terms of trade benefits that country in the sense that it can buy more imports for any given level of exports.

International Marketing: It focuses on firm-level marketing practices across the border, including market identification and targeting, entry mode selection, and marketing mix and

strategic decisions to compete in international markets.

International Investments: It implies cross-border transfer of resources to carry out business activities. It may either be portfolio investment with short-term objectives of capital investments with long-term objectives.

International Management: It refers to application of management concepts and techniques in a cross-country environment and adaptation to different social-cultural, economic, legal, political and technological environment.

International Business: This may be defined as all those activities that involve cross-border transactions of goods, services, and resources between two or more nations. Transaction of economic resources include capital, skills, people, etc. for international production of physical goods and services such as finance, banking, insurance, construction, etc. An international transaction involves both international trade and international investments.

Global Business: Global business refers to the conduct of business activities in several countries, using a highly coordinated and single strategy across the world.

As the differences in the terms 'international business' and 'global business' are more semantic in nature, both the terms are generally used interchangeably in business literature.

36.3 WHY TO GO INTERNATIONAL?

There are many reasons to the question why firms go international. The factors which motivate or provoke firms to extend their business from domestic market to international market may be broadly categorized into two groups, namely, the pull factors and push factors. The pull factors, most of which are proactive reasons, are those forces of attraction which pull the business to foreign markets. In other words, companies are motivated to internationalise because of the attractiveness of the foreign market. Such forces include relative profitability and marketing opportunity. On the other hand, push factors are those forces which arise out of compulsions of domestic market, like saturation of the market, which prompt companies to internationalise. Most of such factors are reactive reasons.

The factors motivating firms to extend their business to international markets may also be classified under three heads, viz., market seeking motives, economic motives, and strategic motives.

a. Market Seeking Motives:

Marketing opportunities due to life cycles: These are the opportunities arising from the differences in the stages of business cycles in different countries. When marketing opportunities for a product or service get saturated in a domestic or international market, a firm can make use of such challenges and convert them into marketing opportunities either by expanding overseas or by shifting its operations from one country to another.

Uniqueness of product or service: Product with unique attributes are unlikely to meet any competition in the overseas markets. This offers enormous opportunities for marketing abroad. For example, Himalayan herbs and medicinal plants from India and the value-added Business Process Outsourcing (BPO) services and software

development at competitive prices provide Indian firms an edge for overseas expansion. (Joshi, 2009).

b. Economic Motives

Profitability: Higher profits from overseas business operations form a significant motive for international expansion. Such differences in profitability between countries may be due to many factors, among which some are listed below.

1. Price difference
2. Export incentives in home country government
3. Fiscal incentives by host country government
4. Low cost of raw materials, human resources, capital etc., in host country
5. Low intensity of competition in host country

Economies of Scale: Large size production capacities necessitate domestic firms to dispose off their goods in international markets. When the production is too large to be consumed in domestic market, firms have to export the products to the foreign markets.

c. Strategic Motives:

Growth: For companies from smaller countries like Singapore, Hong Kong, Scandinavia, etc., the expansion of business to overseas is must for survival. However, for companies from larger countries US, China and India, growth is hardly a motive for international expansion.

Risk: International expansion of business is also used as a risk mitigating strategy so as to offset the economic uncertainties in the home country. Operating in several countries reduces dependence on any particular market and spreads the business risks.

36.4 DOMESTIC AND INTERNATIONAL BUSINESS a distinction

The basic difference in domestic and international business arises from the differences in environment of their operations. These differences are summerised as under:

Economic Environment: Within the nation economic environment is more or less the same in all the regions of the country. For instance, the government policies with respect to interest rates, taxes, wages or prices are the same within the country. Market structures – the degree of competition of monopoly in production – and consumer taste patterns and preferences are more or less the same throughout the country. All of them would add up to creating a certain economic environment or investment climate within the nation. But between nations, they could all differ very significantly. This would make the character of international business different from that of domestic business.

Socio-cultural Environment: Cultural factors play an important role in operating business internationally. Values and beliefs differ from one country to other. A popular example of cultural differences with regards to time is no doubt this: Everyone would agree that Germans are well-known for their punctuality. In many African and South

American countries, however, scheduled appointments are often treated like a general guideline rather than something one has to strictly abide by.

Legal Environment: Firms involved in global business must be familiar with and obey the laws of their home country, the local laws of each country in which they do business, and international laws.. For example, countries may well have different laws covering employees such as minimum wages, overtime, insurances, maximum work weeks, and so on. There are also often differing rules regarding product testing and safety. Businesses must also follow those international laws which govern international trade. For example, **dumping** which is a practice of selling exported products at a very low price, in some instance, lower than the cost of production with the ultimate intention to drive local competitors out of the market. Under the pressure of local companies, governments may find it necessary to intervene to prevent such practice by adopting antidumping laws and regulations.

Political Environment: Perhaps the most important considerations for global business firms are the political and legal forces operative in the countries in which they plan to conduct business. Some foreign governments are unstable, that is, there may be frequent, dramatic and unpredictable regime changes and/or political unrest. When this occurs industries may be nationalized; private property may be seized or destroyed; normal business operations may be suspended, the workforce may go on strike. Even within relatively stable governments, as different administrations come to power different business regulations and attitudes may be adopted.

Technology: This comprises factors related to the materials and machines used in manufacturing goods and services. The organization's receptivity and willingness to adapt to new technology, as well as the willingness of its consumers to do likewise, influences decisions made in an organization. As firms have no control over the external environment, their success depends upon how well they adapt to it. A firm's ability to design and adjust its internal variables to take advantage of opportunities offered by the external environment, and its ability to control threats posed by the same environment, determines its success.

36.5 STAGES IN INTERNATIONALISATION

Most companies pass through different stages of internationalization. There are, of course, many companies which have international business since their very beginning, including 100 per cent export oriented companies. Even in the case of many of the hundred percent export oriented companies, the development of their international business would pass through different stages of evolution.

A firm which is entirely domestic in its activities normally passes through different stages of internationalization before it becomes a truly global one. In many firms overseas business initially starts with a low degree of commitment or involvement; but they gradually develop a global outlook and embark upon overseas business in a big way.

Each term is distinct and has a specific meaning which define the scope and degree of interaction with their operations outside of their “home” country.

- **International companies** are importers and exporters, they have no investment outside of their home country.
- **Multinational companies** have investment in other countries, but do not have coordinated product offerings in each country. More focused on adapting their products and service to each individual local market.
- **Global companies** have invested and are present in many countries. They market their products through the use of the same coordinated image/brand in all markets. Generally one corporate office that is responsible for global strategy. Emphasis on volume, cost management and efficiency.
- **Transnational companies** are much more complex organizations. They have invested in foreign operations, have a central corporate facility but give decision-making, R&D and marketing powers to each individual foreign market.

36.6 INTERNATIONAL BUSINESS DECISIONS

When a firm plans to go international, it has to make a series of strategic decisions. They are broadly the following (Fig. pp-23).

International Business Decision: The first decision a company has to make, of course, is whether to take up international business or not. This decision is based on a serious consideration of a number of important factors, such as the present and future overseas opportunities, present and future domestic market opportunities, the resources of the company, company objectives, etc.

Market Selection Decision: Once it has been decided to go international the next important step is the selection of the most appropriate market. For this purpose, a thorough analysis of the potentials of the various overseas markets and their respective marketing environments is essential. Company resources and objectives may not permit a company to do business in all the overseas markets. Further, some markets are not potentially good and it may be suicidal to waste company resources in such markets. A proper selection of the overseas markets therefore is very important.

Entry and Operating Decisions: Once the market selection decision has been made, the next important task is to determine the appropriate mode of entering the foreign market.

Marketing Mix Decision: The foreign market is characterised by a number of uncontrollable variables. The marketing mix consists of internal factors which are controllable. The success of international marketing, therefore, depends to a large extent on the appropriateness of the marketing mix. The elements of the marketing mix-product, promotion, price and physical distribution-should be suitably designed so that they may be adapted to the characteristics of the overseas market.

International Organisation Decision: A company which wants to do direct exporting has also to decide about its organizational structure so that the exporting function may be properly performed. This decision should necessarily be based on a careful consideration of such factors as the expected volume of export business, the nature of the overseas

market, the nature of product, the size and resources of the company, and the length of its export experience. The nature of the organization structure of the company will depend on a number of factors like its international orientation, nature of business, size of business, future plans, etc.

Lesson-37 Absolute Advantage Theory of International Trade

37.1 INTRODUCTION

The exchange of goods across the national borders is termed as international trade. Countries differ widely in terms of the products and services traded. Countries rarely follow the trade structure of the other nations; rather they evolve their own product portfolios and trade patterns for exports and imports. Besides, nations have marked differences in their vulnerabilities to the upheavals in exogenous factors. There are various theories of international trade which are grouped in to classical and neo-classical theories. We will discuss only the classical theory of international trade. This lesson aims to discuss absolute advantage theory of international trade and the next lesson you are going to study the comparative advantage theory of international trade. This will provide a conceptual understanding of the fundamental principles of international trade and shifts in trade patterns.

37.2 THEORY OF MERCANTILISM

The theory of mercantilism attributes and measures the wealth of a nation by the size of its accumulated treasures. Accumulated wealth is traditionally measured in terms of gold, as earlier gold and silver were considered the currency of international trade. Mercantilists, therefore, suggested that the fundamental task of the national government is to acquire as much of gold and other precious metals as possible, through foreign trade. The only way in which this can be accomplished by a country is, when it is able to run perpetually favourable balance of trade for itself. i.e. by exporting more and more and importing less and less. The difference between exports and imports, which must be always in favour of the nation, would be settled by an inflow of gold and other precious metals. The more gold the nation had, richer and more powerful it would be. All this could be guaranteed by foreign trade that is in favour of the country. The mercantilists, as great “nation builders” advocated that the government should adopt policies which are designed to restrict imports and stimulate exports; because we lose gold by importing and earn gold by exporting. The theory of mercantilism aims at creating trade surplus, which in turn contributes to the accumulation of a nation’s wealth. Between the 16th and 19th centuries, European colonial powers actively pursued international trade to increase their treasury of goods, which were in turn invested to build a powerful army and infrastructure.

Mercantilism was implemented by active government interventions, which focused on maintaining trade surplus and expansion of colonization. National governments imposed restrictions on imports through tariffs and quotas and promoted exports by subsidizing production. The colonies served as cheap sources for primary commodities, such as raw cotton, grains, spices, herbs and medicinal plants, tea, coffee, and fruits, both for consumption and also as raw material for industries. Thus, the policy of mercantilism greatly assisted and benefited the colonial powers in accumulating wealth.

The main limitation of this theory is accumulation of wealth takes place at the cost of

THE main limitation of this theory is, accumulation of wealth takes place at the cost of another trading partner. If one nation has to gain from international trade the partner country must lose. Therefore, international trade is treated as a win-lose game resulting virtually in no contribution of global wealth. Thus, international trade becomes zero-sum game.

A number of national governments still seem to cling to the mercantilist theory, and exports rather than imports are actively promoted. This also explains the reason behind the 'import substitution strategy' adopted by a large number of countries prior to economic liberalization. This strategy was guided by their keenness to contain imports and promote domestic production even at the cost of efficiency and higher production costs. It has resulted in the creation of a large number of export promotion organizations that look after the promotion of exports from the country. However, import promotion agencies are uncommon in most nations. Presently, the terminology used under this trade theory is neo-mercantilism, which aims at creating favourable trade balance and has been employed by a number of countries to create trade surplus.

37.3 THEORY OF ABSOLUTE ADVANTAGE

In 1776, Adam Smith published his famous book *The Wealth of Nations*, in which he attacked the mercantilist view and showed that it was all wrong and illogical, for one thing, not all nations can have an export surplus simultaneously. Mercantilist policy, therefore, cannot be considered as international economic policy. Their policy was highly nationalistic and biased heavily against the other countries. It was Adam Smith who first developed a model of international trade and showed convincingly that all countries could gain from trade. Mercantilists had measured the wealth of nation by the stock of precious metals that the nation possessed. Adam Smith rejected all this and argued instead, that the wealth of a nation is measured by the amount of goods and services that a nation produced, or by what is today called Gross National Product (GNP). He developed the comparative advantage model, where he showed that international trade could bring gains to all trading nations, thereby improving the wealth and standards of living of all the participating nations. In his model of trade, unlike the mercantilist's model, a nation need not gain only at the expense of other nations; here all nations gain together and simultaneously.

An absolute advantage refers to the ability of a country to produce a good more efficiently and cost-effectively than any other country. Smith elucidated the concept of 'absolute advantage' leading to gains from specialization with the day-to-day illustrations as follows:

"It is the maxim of every prudent master of a family, never to make at home what is will cost him more to make than to buy. The taylor does not attempt to make his own shoes, but buys them from shoemaker. The shoemaker does not attempt to make his own clothes, but employs a taylor. The farmer attempts to make neither..."

What is true in the conduct of a family may also be applied for the nations. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it from them with some part of the produce of our own industry. Thus he advocated, instead of producing all products, each country should specialize in producing those goods that it can produce more efficiently. A country's advantage may be either natural or acquired.

2.3.1 Natural Advantage

Natural factors, such as a country's geographical and agro climatic conditions, mineral

Natural factors, such as a country's geographical and agro-climatic conditions, mineral or other natural resources, or specialized manpower contribute to a country's natural advantage in certain products. For instance, the agro-climatic condition in India is an important factor for sizeable export of agro-produce, such as spices, cotton, tea and mangoes etc. The availability of relatively cheap labour contributes to India's edge in export of labour-intensive products. The production of wheat and maize in US, petroleum in Saudi Arabia, citrus fruits in Israel, lumber in Canada, and aluminum ore in Jamaica are illustrations of natural advantages.

2.3.2 Acquired Advantage

The acquired advantage in either a product or its process technology plays an important role in creating such a shift. The ability to differentiate or produce a different product is termed as an advantage in product technology, while the ability to produce a homogenous product more efficiently is termed as an advantage in process technology. Development of software products in India, production of consumer electronics and automobiles in Japan, watches in Switzerland and shipbuilding in South Korea may be attributed to acquired advantage. Export centers in for precious and semi-precious stones in Jaipur, Surat, Navasari and Mumbai have come up not just because of their raw material resources but the skills they have developed in processing imported raw stones.

To appreciate the theory of absolute advantage, consider an example of two countries and two commodities model. Let Malaysia and India be the two such countries and Rubber and Textiles be the commodities. Assume that in the production of these commodities in two countries, there are constant returns to scale conditions i.e. there are constant marginal opportunity cost conditions in both countries in both commodities. Assume further production possibilities are such that both countries can produce both the goods if they wish. Finally assume that both countries have X amount of factors of production such that,

- a. With X factors of production, Malaysia can produce either 100 units of rubber or 50 units of textiles, or mix of rubber and textiles in the opportunity cost ratio of 2:1 (i.e. to produce 1 more unit of textiles, it has to give up the opportunity of producing 2 units of rubber).
- b. With X factors of production India can produce either 50 units of rubber or 100 units of textiles. Or some other combination of rubber and textiles subject to the opportunity cost ratio of 1:2 (This means that India has to give up producing 1 unit of rubber in order to produce 2 units of textiles or alternatively, India has to give up the opportunity of producing 2 units of textiles in order to produce 1 more unit of rubber).

From the above supply conditions it is quite clear that Malaysia has an absolute advantage in the production of rubber and India has the absolute advantage in the production of textiles. This shows there is scope for specialization in production and also of establishing mutually beneficial trade between the two countries. Now let us see how it happens.

First in a situation of autarky or no trade, each country can produce and consume independent of other country, a combination of rubber and textile as shown in table 37.1. Malaysia produces and consumes 50 units of rubber plus 25 units of textiles (total 75 units). India produces 25 units of rubber plus 50 units of textiles (total 75 units). Therefore, in absence of any trade, the total units produced in the world are 150 units.

Table 37.1. Production and consumption levels with no trade

Countries	Commodities		Total output (units)
	Rubber (units)	Textiles (units)	
Malaysia	50	25	75
India	25	50	75
World	75	75	150

Let us now examine what happens if they trade with each other. This is shown in the table 37.2. Malaysia would specialize in production of rubber and India in production of textiles with 100 units of rubber and textiles respectively by utilizing all the resources. Thus the total production in the world would be 200 units. Thus opening up trade resulted in higher production in both the countries. Both the countries became richer after trade in terms of production. This is production gain from international trade.

Table 37.2. Production levels after international trade

Countries	Commodities		Total output (units)
	Rubber (units)	Textiles (units)	
Malaysia	100	0	100
India	0	100	100
World	100	100	200

What about the consumption gain? This depends on how the gains from the production are distributed between the two countries. In other words, it depends on the terms of trade, i.e., how many units of rubber exchange for one unit of textiles between India and Malaysia.

Suppose terms of trade are fixed at 1:1 i.e. Malaysia and India agree to exchange 1 unit

Agribusiness Management and Trade

Suppose terms of trade are fixed at 1:1 i.e., Malaysia and India agree to exchange 1 unit of rubber for 1 unit of textiles. Then depending on the taste pattern in the two countries and upon how much they want to trade each other's goods, the consumption gains can be determined. Supposing that the consumers in both countries want to consume some mix of both the goods; then Malaysia could export say 40 units of rubber in exchange for 40 units of textile imports from India. The resulting situation will be like that is presented in table 37.3. Malaysia after trade has produced 100 units of rubber. Consumers wish to consume 60 units of rubber to India. Malaysia exports 40 units of rubber to India in exchange for 40 units of textile imports from India. Similarly for India, it imports 40 units of rubber and exports 40 units of textiles. India's post trade consumption of rubber and textile is 40 and 60. Clearly consumers in both the countries have gained from the trade.

The same analogy can be applied what happens if the terms of trade are different.

Table 37.3. Consumption shares after international trade

Countries	Commodities		Total output (units)
	Rubber (units)	Textiles (units)	
Malaysia	60	40	100
India	40	60	100
World	100	100	200

Lesson-38 Comparative Advantage Theory of International Trade

38.1 INTRODUCTION

The other most important classical theory of international trade is the comparative advantage theory. This theory was given by David Ricardo who went even further and argued that even if the countries did not have absolute advantage in any line of production over the others, international trade would be beneficial, bringing gains from trade to all the participating countries. Ricardo model is termed as comparative advantage model, as opposed to Smith's model of absolute advantage. Ricardo model is further refinement of Smith's model. This is discussed below.

38.2 UNDERSTANDING COMPARATIVE ADVANTAGE THEORY

Suppose country A is better than country B at making automobiles, and country B is better than country A at making bread. It is obvious (the academics would say “trivial”) that both would benefit if A specialized in automobiles, B specialized in bread and they traded their products. That is a case of **absolute advantage**.

But what if a country is bad at making everything? Will trade drive all producers out of business? The answer, according to Ricardo, is no. The reason is the principle of **comparative advantage**.

It says, countries A and B still stand to benefit from trading with each other even if A is better than B at making everything. If A is much more superior at making automobiles and only slightly superior at making bread, then A should still invest resources in what it does best — producing automobiles — and export the product to B. B should still invest in what it does best — making bread — and export that product to A, even if it is not as efficient as A. Both would still benefit from the trade. A country does not have to be best at anything to gain from trade. That is comparative advantage. It is one of the most widely accepted among economists. It is also one of the most misunderstood among non-economists because it is confused with absolute advantage.

Let us again assume a world of two countries and two commodities. Malaysia and India are two countries and two countries, rubber and textiles are the two commodities. The production possibilities (supply conditions) in the two countries are such that both countries can produce both goods if they wanted. In this model we assume that one country has the absolute advantage over the other country in both the lines of production, and the other country has absolute disadvantage in both the lines of production (contrast to the Smith's model, where one country has absolute advantage in one line and the other country in the other line). In Ricardo's model, one country's comparative advantage is greater in one line of production and the other country's comparative disadvantage is smaller in the other line of production. International trade would bring production gains when these two countries enter into trade with each other. Let us see with the help of a numerical model, how that happens.

The following table shows the production possibilities in the two countries

Table 38.1. Production Possibilities in India and Malaysia

Countries	Commodities		International Opportunity (cost ratios)
	Textiles (units)	Rubber (units)	
Malaysia	120 or	120	1:1
India	40 or	80	1:2

With 'x' factors of production, India can produce 120 units of textiles or 120 units of rubber of any combination of textiles and rubber at the constant opportunity cost ratio of 1:1 i.e., India can produce 1 unit of rubber (or textiles) by giving up the opportunity of producing 1 unit of textiles (or rubber). India is equally efficient in the production of the two commodities.

Malaysia on the other hand, is equally inefficient in either line of production compared with India; because, with 'x' factors of production it can produce either 40 units of textiles (compared with 120 units) or 80 units of rubber (compared with India's 120 units) or any combination of textiles and rubber at the constant opportunity cost ratio of 1:2. Here it can be noted that unit cost of producing rubber is less than the unit cost of producing textiles, when we measure unit costs in terms of the units of alternative commodity foregone.

In terms of comparative advantages and disadvantages following observations can be made.

1. India's comparative advantage over Malaysia is greater in production of textiles (3:1) as compared to rubber (1.5:1). Therefore, India should specialize in the production of textiles rather than rubber, although India can produce both the goods equally efficiently.
2. Malaysia's comparative disadvantage in relation to India is lower in the production of rubber (1:1.5) as against textiles (1:3). Hence Malaysia should specialize in the production of rubber, not because it has absolute advantage over India in this line but because its comparative disadvantage is less in this line of production than in the other line of production (textiles).

The theory of comparative advantage suggests that a country should specialize in the production and export of those goods in which either its comparative advantage is greater or its comparative disadvantage is less; and it should import those goods in the production of which its comparative advantage is less or comparative disadvantage is greater. Thereby, a country would be able to maximize its production and its consumption.

Before we examine the gains from trade for the two countries arising out of such specialization, let us consider what the production levels would be, for the two countries, in absence of trade. The table 38.2 represents this equilibrium under autarky. India produces and consumes 80 units of textiles plus 40 units of rubber, for a total production of 120 units.

Malaysia produces and consumes 20 units of textiles plus 40 units of rubber for a total production of 60 units. The world production is 180 units.

Table 38.2. Production and consumption levels under autarky

Countries	Commodities		Total production & consumption (Units)
	Textiles (units)	Rubber (units)	
Malaysia	80	40	120
India	20	40	60
World	100	80	180

If, however, the two countries decide to enter into trade breaking their isolation, there would be international specialization in production, leading to increase in the world production. In the table 38.3 the production gains are shown. World production has gone up from 180 to 200 after the introduction of trade. This is entirely due to production gains resulting from specialization in Malaysia, after trade. There are no production gains to be derived from specialization as far as India is concerned, because India's level of production is the same both before and after trade. This suggests that small countries tend to benefit more than the large countries from the standpoint of specialization in production resulting from the international trade.

Table 38.3. Production Levels after International Trade

Countries	Commodities		Total production & consumption (Units)
	Textiles (units)	Rubber (units)	
Malaysia	80	40	120
India	20	40	60
World	100	80	180

Unless both countries stand to gain from trade, there can be no trade between them. Production gains have gone to only Malaysia and India has no production gains from the trade. This means that Indian and Malaysia must have some consumption gains in order that there is mutually beneficial trade between two. How much each country gains from trade in terms of consumption depends entirely on the terms of trade. Instead of considering different terms of trades let us take one case where in the terms of trade between India and Malaysia are, say, 3:4 (i.e., 3 units of textiles have to be exported in order to import 4 units of rubber

or vice versa). In this case, the both the countries will share the benefits equally. This is because these international terms of trade lie exactly between the two internal opportunity cost ratios of India and Malaysia. The consumption gains resulting from such international terms of trade for the two countries are shown in table 38.4.

India after trade produces 120 units of textiles and consumes 90 units of it and exports the remaining 30 units to Malaysia. By exporting 30 units of textiles, India receives 40 units of rubber as imports from Malaysia at the terms of trade of 3:4. This means, when the trade transacting is completed, Malaysia will have 30 units of textiles plus 40 units of rubber for its own consumption. Compare India's post-trade consumption of the two commodities in table 38.4. (viz 90+40) with their pre-trade levels in table 38.2 (viz. 80+40) and will notice that a net consumption gain of 10 units. Similarly the gain for Malaysia will be 10 units.

Table 38.4. Consumption Levels after International Trade

Countries	Commodities		Total production & consumption (Units)
	Textiles (units)	Rubber (units)	
Malaysia	80	40	120
India	20	40	60
World	100	80	180

Here you can notice that the world production gain of 20 units has resulted entirely from the production gain in Malaysia, and the production gain has been in terms of Malaysia product viz, rubber. Consumption gain for the two countries, 10 each for India and Malaysia has been in terms of India's product viz, textiles. If the terms of trade are different gains for the countries will also differ.

Lesson-39 Understanding the WTO

39.1 INTRODUCTION

Trade between countries has been an age-old practice. In reality, it was free and there were not many restrictions. Transportation and settlement systems were the problems of trade between countries. The mode of transportation was sea, encountering problems like loss of life and goods due to poor navigation and pirate menace. The settlement was through gold or barter system. As the communication and transportation facilities improved and new settlement systems evolved, it was natural to expect increased international trade. However, several restrictions on international trade started creeping in viz, to protect domestic industry, to protect the prices of the goods in local markets, balance of payment problem, political reasons etc. Therefore, foreign trade was affected and led to scarcity of goods in some parts of the world and glut in other parts. Even before the second world ended, the allied countries gave serious thought in developing a system that would end the chaotic conditions prevailing and pave the way for an orderly conduct of international trade and promote good monetary relations among the countries. The efforts towards this end resulted in formation of GATT which then was replaced by WTO. This chapter discusses the origin and evolution of WTO.

39.2 ORIGIN OF GATT

The developed countries started working with the objective of finding a system which would:

- Help to remove the restrictions on trade
- Ensure free convertibility of currencies
- Maintain stability in exchange rates among the currencies

The representatives of 44 allied countries met at Brettonwoods, New Hampshire, USA in June 1944 to give a concrete shape to their ideas. The conference made recommendations to set up three international organizations viz., International Monetary Fund (IMF) to deal with the problems of balance of payments, International Bank for Reconstruction and Development (IBRD) to deal with the problems of reconstruction and development of economies of countries shattered in the two world wars and International Trade Organisation (ITO) to deal with the problems of international trade. The first two were set up in 1945 but there were serious controversies about the third i.e. ITO and therefore could not be established.

Over 50 countries participated in negotiations to create ITO as a specialized agency of United Nations (UN). The draft ITO charter was ambitious. It extended beyond world trade disciplines, to include rules on employment, commodity agreements, restrictive business practices, international investment and services. The aim was to create the ITO at a UN

practices, international investment, and services. The aim was to create the ITO at a UN conference on Trade and Employment in Havana, Cuba in 1947. During the negotiations before the conference, 23 countries came together and signed the package of trade rules and tariff concessions on 30 October 1947. So the new General Agreement on Tariffs and Trade (GATT) was born, with 23 founding members. India was also a founding member of GATT. Subsequently, when the conference began on 21 November 1947, ITO could not be established because of Havana charter was not ratified by US congress. So the GATT which came into force with effect from 1 January 1948 became the only multilateral instrument governing international trade until the WTO was established in 1 January 1995.

39.3 OBJECTIVE OF GATT

- Raising standard of living of public world over
- Ensuring full employment and a large and steadily growing volume of real income and effective demand in all the countries.
- Developing full use of resources of the world and
- Expansion of production and international trade.

39.4 CONVENTIONS AND PRINCIPLES OF GATT

GATT embodies certain conventions and general principles governing international trade among the member countries that adhere to the agreement. The rules of conventions of GATT require that:

1. Any proposed change in the tariff or other type of commercial policy of a member country should not be undertaken without consultation of other parties to the agreement and
2. That the countries that adhere to GATT should work towards the reduction of tariffs and other barriers to international trade which should be negotiated within the frame work of GATT.

• Principles of GATT

1. Non-discrimination: The principle of non-discrimination requires that no member country shall discriminate between the members of GATT in the conduct of international trade. To ensure this the members agree to apply the principle of Most Favoured Nation (MFN) to all member countries on import and export duties. As for as quantitative restrictions are permitted, they too are to be administered without favour to any country. Each nation shall be treated as well as the most faovoured nation.

2. Prohibition of Quantitative Restrictions (QRs): GATT rules seek to prohibit quantitative restrictions as far as possible and limit the restrictions on trade to the less rigid tariffs. However, certain exceptions to this prohibition are granted to countries confronted with balance of payments difficulties and to developing countries.

3. Consultation: By providing a forum for continuing consultations, GATT seeks to resolve

3. Consultation. By providing a forum for continuing consultations, GATT seeks to resolve disagreements through consultations.

On account of persistent follow up by member developing countries for removing or modifying the provisions which are perceived to be biased against them, eight rounds of trade negotiations were held during the period from 1947 to 1994. They were Geneva Round (1947), Annecy Round (1949), Torquay Round (1951), Geneva Round (1956), Dillon Round (1960-61), Kennedy Round (1964-67), Tokyo Round (1973-79) and Uruguay Round (1986-94).

39.5 ORIGIN OF WTO

Eighth round of multilateral trade negotiations held under the auspices of the GATT is known as the Uruguay round because it was launched in punta del Esta in Uruguay in September 1986. While GATT covered international trade in goods, idea of creating WTO was to include trade in services and intellectual property and to reform trade in the sensitive sectors of agriculture and textiles. Arthur Dunkel, the then Director General of GATT, presented a draft act embodying the negotiations of the Uruguay round. This was popularly known as Dunkel draft. This was replaced by an enlarged and modified final text which was approved by delegations from the member countries of the GATT on 15 December 1993. This final act was signed by Ministers of 125 Governments on 15 April 1994. The results of the Uruguay Round are to be implemented within ten years different time periods are given for effecting the different agreements.

The most important decision at the Uruguay round was setting up of WTO to replace GATT. The WTO located at Geneva (Switzerland) came into effect on 1 January 1995. It brought international trade rules to areas previously excluded or subjected to weak rules (agriculture, textiles and clothing), services, trade related intellectual property rights (TRIPS) and trade related investment measures (TRIMS) and strengthened the dispute settlement mechanism. Thus, WTO is the international organization dealing with the global rules of trade between nations. Its objective is to help trade flow smoothly, freely, fairly and predictably. It does this by:

1. Trade negotiations

The WTO agreements cover goods, services and intellectual property. They spell out the principles of liberalization, and the permitted exceptions. They include individual countries' commitments to lower customs tariffs and other trade barriers, and to open and keep open services markets. They set procedures for settling disputes. These agreements are not static; they are renegotiated from time to time and new agreements can be added to the package. Many are now being negotiated under the Doha Development Agenda, launched by WTO trade ministers in Doha, Qatar, in November 2001.

2. Implementation and monitoring

WTO agreements require governments to make their trade policies transparent by notifying the WTO about laws in force and measures adopted. Various WTO councils and committees seek to ensure that these requirements are being followed and that WTO

agreements are being properly implemented. All WTO members must undergo periodic

agreements are being properly implemented. All WTO members must undergo periodic scrutiny of their trade policies and practices, each review containing reports by the country concerned and the WTO Secretariat.

3. Dispute settlement

The WTO's procedure for resolving trade quarrels under the Dispute Settlement Understanding is vital for enforcing the rules and therefore for ensuring that trade flows smoothly. Countries bring disputes to the WTO if they think their rights under the agreements are being infringed. Judgments by specially appointed independent experts are based on interpretations of the agreements and individual countries' commitments.

4. Building trade capacity

WTO agreements contain special provision for developing countries, including longer time periods to implement agreements and commitments, measures to increase their trading opportunities, and support to help them build their trade capacity, to handle disputes and to implement technical standards. The WTO organizes hundreds of technical cooperation missions to developing countries annually. It also holds numerous courses each year in Geneva for government officials. Aid for Trade aims to help developing countries develop the skills and infrastructure needed to expand their trade.

5. Outreach

The WTO maintains regular dialogue with non-governmental organizations, parliamentarians, other international organizations, the media and the general public on various aspects of the WTO and the ongoing Doha negotiations, with the aim of enhancing cooperation and increasing awareness of WTO activities.

39.6 OBJECTIVES OF WTO

The following are the objectives of WTO spelt out in the preamble to the WTO agreement.

1. In the field of trade and economic development, its relations will be guided by following
 - a. Raising the standards of living
 - b. Achieving full employment and increasing the volume of real income and effective demand and
 - c. Expanding the production and trade in goods and services
2. towards the fulfillment of the overall objective of sustainable development to ensure the optimal use of world's resources by
 - a. Promoting the protection and preservation of environment
 - b. Augmenting resources commensurate with the respective needs and concerns at different levels of economic development
3. for ensuring that the developing countries, particularly the poorest countries, may get a share in the growth of international trade consistent with their needs of economic development

4. for achievement of these objectives to enter into mutually beneficial arrangements aiming at reduction of barriers and elimination of discrimination in international trade
5. Based on the past agreements and efforts and their results to develop a more viable and durable multilateral trading system
6. for coordinating policies in the field of trade, environment and economic development, to take effective steps.

39.7 ORGANISATIONAL SET-UP OF WTO

1. Ministerial Conference: It is the supreme authority and takes decisions on all matters falling within the purview of an agreement. It consists of all the member countries. It meets at least once in 2 years.

2. General Council: It comes next to the ministerial conference and consists of the representatives of all the member countries. It oversees the operations of WTO agreement and ministerial decisions. Besides, it acts as a dispute settlement body (DSB) and a Trade Policy Review Body (TPRB). It meets once in a month on an average. The general council works through; a. council for trade in goods, b. council for trade in services, c. council for trade related aspects of intellectual property rights (TRIPS).

There are three committees that perform the functions assigned to them under by the general council. The three committees are;

1. Committee on trade and development
2. Committee on balance of payment restriction
3. Committee on budget, finance and administration.

3. Director General: The head of the WTO secretariat is appointed by the general council. The term of the director general is four years.

There are presently 155 members of WTO. Samoa is the latest country to join the member list of WTO on 10th May 18, 2012.

REFERENCES

Subba Reddy S., Raghu Ram P., Neelakanta Sastry T.V., and Bhavani Devi I. 2004. In Agricultural Economics, Oxford & IBH Publishing Co. Pvt Ltd. New Delhi, PP-626-629

Lesson-40 Agreements under WTO**40.1 INTRODUCTION**

The WTO agreements cover goods, services, intellectual property and more sensitive sectors agriculture, textile and clothing. Trade in agricultural commodities was included in the agreement for the first time. They spell out the principles of liberalization and the permitted exceptions. They include individual countries' commitments to lower customs tariffs and other trade barriers and to open and keep open services markets. They set procedures for settling disputes. They prescribe special treatment for developing countries. These agreements are often called rules and the WTO is often described as "rules-based", a system based on rules. But it's important to remember that the rules are actually agreements that governments negotiated. In this lecture, different agreements under WTO are discussed briefly.

40.2 MAJOR AGREEMENTS UNDER WTO

1. Trade Related Investment Measures (TRIMS)
2. Trade Related Aspects of Intellectual Property Rights (TRIPS)
3. General Agreement on Trade in Services (GATS)
4. Agreement on Trade in Textiles and Clothing
5. Plurilateral Trade Agreement (PTA)
6. Agreement on Dispute Settlement Body
7. Trade Policy Review Body (TPRB)
8. Anti-dumping, subsidies, safeguards
9. Agreement on Technical Barrier to Trade (TBT)
10. Sanitary and Phyto-Sanitary measures (SPS)
11. Agreement on Agriculture (AOA)

1. Trade Related Investment Measures (TRIMS)

This agreement seeks to bring about multilateral disciplines on investment practices that distort trade flows. According to this agreement all measures obstructing foreign investment and distorting trade should be removed within two years by developed countries, five years by developing countries and seven years by the least developed countries. The important features of the TRIMS are as follows:

1. All restrictions on foreign capital/investors/companies should be scrapped

2. The foreign investor should be given the same rights in the matter of investment as a national investing.
3. Restrictions will not be place on any area of investment
4. There should not be any limitation on the extent of foreign investment
5. There should not be restrictions on the imports of raw materials and components
6. Foreign investor will not be obliged to use local products and materials
7. It is not mandatory on the part of foreign investor to export a part of the output
8. Elimination of restrictions on repatriation of dividend, interest and royalty.

2. Trade Related Aspects of Intellectual Property Rights (TRIPS)

Intellectual property is economically valuable information. Intellectual property right is the legally enforceable power to exclude others from using the information created, or to set the terms on which it can be used. TRIPS prescribes minimum standards of protection to different intellectual property rights. Members are free to have higher standards at the national level.

The TRIPS agreement encompasses seven areas of intellectual property rights viz., i. copyright, ii. Trademarks, iii. Trade secrets, iv. Industrial designs, v. geographical indications, vi. Patents which also includes microorganisms and plant varieties and vii. Layout designs of integrated circuits.

3. General Agreement on Trade in Services (GATS)

This agreement is based on the desire to establish a multilateral frame work of principles and rules for trade in services with a view to expanding such a trade under conditions of transparency and progressive liberalization. The services refer to banking and insurance, transport, communication, mobility of labour etc.

Under GATS, Most Favoured Nations (MFN) principles will apply to all member countries i.e., if a service of any kind is open to one member country, it should be extended to all member countries in equal measure. The second requirement is transparency i.e., all agreements affecting trade in services shall be published. Further each country is required to make market access commitments on services.

4. Agreement on Trade in Textiles and Clothing

The developed countries imposed most comprehensive quota restrictions under the Multi Fibre Agreement (MFA). This agreement on trade in textiles and clothing proposes to phase out quotas over ten year period beginning with 1 January 1995 and ending with 1 January 2005.

5. Plurilateral Trade Agreement (PTA)

These agreements are: agreement on trade in civil aircraft, agreement on Government procurement, international dairy agreement and international bovine meat agreement.

6. Agreement on Dispute Settlement Body

The dispute settlement process consists of consultations between the parties, failing which conciliation and mediation by the director general if agreed by the parties or a panel of three experts. It also provides for an appellate review by a standing appellate body, consisting of seven members set up by DSB to report to it within 90 days. The decision of the DSB will be binding on both the parties.

7. Trade Policy Review Body (TPRB)

This has been set up to carry out trade policy reviews. Frequency of such reviews depends on the share of a member in world trade.

8. Anti-dumping, subsidies, safeguards

Dumping is selling goods in a foreign country at a price which local producers regard as unfairly low. It means selling of goods at less than the long-run average cost of production plus transport cost, i.e., charging a lower price in export market than is charged for comparable goods in home markets; or simply selling at a price with which producers in the importing country cannot compete. Dumping is considered as unfair trade practice which can have distortive effect on international trade.

Anti-dumping is a measure to rectify the situation arising out of the dumping of goods and its trade distortive effect. Anti-dumping duties are tariffs imposed in response to alleged dumping. The purpose of anti-dumping duty is thus to rectify the trade distortive effect of dumping. Anti-dumping duty is an instrument for ensuring fair trade and is not a measure of protection per se for the domestic industry. It provides relief to the domestic industry against the injury caused by dumping.

9. Agreement on Technical Barrier to Trade (TBT)

- Technical regulations and standards set out specific characteristics of a product-such as its size, shape, design, functions and performance, or the way it is labeled or packaged before it is put on sale
- In certain cases, the way a product is produced can affect these characteristics, and it may then prove more appropriate to draft technical regulations and standards in terms of a product's process and production methods rather than its characteristics per se.
- The TBT Agreement makes allowances for both approaches in the way it defines technical regulations and standards.

10. Sanitary and Phyto sanitary Measures Agreement (SPS)

Article 20 of the General Agreement on Tariffs and Trade (GATT) allows governments to act on trade in order to protect human, animal or plant life or health, provided they do not discriminate or use this as disguised protectionism. In addition, there are two specific WTO agreements dealing with food safety and animal and plant health and safety and with product standards in general. Both try to identify how to meet the need to apply standards and at the same time avoid protectionism in disguise. These issues are

becoming more important as tariff barriers fall — some compare this to seabed rocks appearing when the tide goes down. In both cases, if a country applies international standards, it is less likely to be challenged legally in the WTO than if it sets its own standards.

Problem: How do you ensure that your country's consumers are being supplied with food that is safe to eat — “safe” by the standards you consider appropriate? And at the same time, how can you ensure that strict health and safety regulations are not being used as an excuse for protecting domestic producers?

An agreement on how governments can apply food safety and animal and plant health measures (sanitary and phytosanitary or SPS measures) sets out the basic rules in the WTO. A separate agreement on food safety and animal and plant health standards (the Sanitary and Phytosanitary Measures Agreement or SPS) sets out the basic rules.

40.3 KEY FEATURES OF SPS MEASURES AGREEMENT

- SPS measures to be based on scientific risk assessment
- Countries should base their SPS measures on international standards
- Countries may have higher level of SPS measures but shall be based on scientific risk assessment
- Transparency: All proposed, new and changed measures are to be notified by members to the SPS Committee of WTO Secretariat

40.4 PROBLEM FACED BY INDIA IN IMPLEMENTING THE SPS PROVISIONS

- Lack of adequate time to adapt to SPS measures and adequate advance warning about the new measures
- High cost of adoption
- Unwillingness on the part of the developed countries to accept equivalent measures of developing countries
- Lack of adequate technical assistance to developing countries particularly for creating infrastructure necessary for ensuring quality testing standards
- Ineffective participation in the activities of the international standardizing bodies leading to standards getting fixed by default

40.5 Strategy Recommended for Future

- Upgradation of standard within India
- Building-up scientific evidence to counter unreasonable SPS measures
- Exporters should examine WTO-compatibility of health and sanitary regulations/product standards
- Close-co-ordination between Government and Exporters regarding specific cases

- Need for framing of standards for manufacture, production units/processes, monitoring contaminants, sampling procedures and additives.

40.6 Agreement on Agriculture (AOA)

The Agreement on Agriculture (AOA) forms a part of the final act of the Uruguay round of multilateral trade negotiations. The Uruguay round marked a significant turning point in world trade in agriculture, for the first time, agriculture featured in a major way in the GATT round of multilateral trade negotiations. The Uruguay round agreement sought to bring order and fair competition to this highly distorted sector of world trade by establishment of fair and market oriented agricultural trading sector.

The main cause of distortion of international trade in agriculture has been the massive domestic subsidies. (A subsidy is deemed to exist if there is a financial contribution by a Government on any public body and a benefit is conferred) given by the industrialized countries to their agricultural sector over many years. This in turn led to excessive production and its dumping in international markets as well as import restrictions to keep out foreign farm products from their domestic market. Hence, the starting point for the establishment of a fair agricultural trade regime should be the reduction of domestic subsidies given by the developed countries, reduction in the volume of subsidized exports and minimum market access opportunities for agricultural producers worldwide. AOA has three main components;

- Market Access
- Domestic subsidy or domestic support and
- Export subsidies

These three components are discussed in detail in next chapters.

Lesson-41 Agreement on Agriculture

41.1 INTRODUCTION

The Agreement on Agriculture forms a part of the Final Act of the Uruguay Round of Multilateral Trade Negotiations, which was signed by the member countries in April 1994 at Marrakesh, Morocco and came into force on 1st January, 1995. The Uruguay Round marked a significant turning point in world trade in agriculture. For the first time, agriculture featured in a major way in the GATT round of multilateral trade negotiations. The obligations and disciplines incorporated in the Agreement on Agriculture, therefore, relate to, market access, domestic subsidy or domestic support and export subsidy which are explained below.

41.2 MARKET ACCESS

Under the reform programme, members have converted their non-tariff measures to equivalent bound tariffs. Some additional market access is provided through tariff rate quotas, and the tariffs are being reduced. Contingency protection is provided through special safeguards, and transparency works through notifications.

41.2.1 The Conceptual Framework

On the market access side, the Uruguay Round resulted in a key systemic change: the switch from a situation where a myriad of non-tariff measures impeded agricultural trade flows to a regime of bound tariff-only protection plus reduction commitments. The key aspects of this fundamental change have been to stimulate investment, production and trade in agriculture by

- making agricultural market access conditions more transparent, predictable and competitive,
- establishing or strengthening the link between national and international agricultural markets, and thus
- relying more prominently on the market for guiding scarce resources into their most productive uses both within the agricultural sector and economy-wide.

In many cases, tariffs were the only form of protection for agricultural products before the Uruguay Round — the Round led to the “binding” in the WTO of a maximum level for these tariffs. For many other products, however, market access restrictions involved non-tariff barriers. The Uruguay Round negotiations aimed to remove such barriers. For this purpose, a “tariffication” package was agreed which, amongst other things, provided for the replacement of agriculture-specific non-tariff measures with a tariff which afforded an equivalent level of protection. The tariffs resulting from the tariffication process account, on average of the developed country Members, for around one fifth of the total number of agricultural tariff lines. For the developing country Members, this

share is considerably smaller. Following the entry into force of the Agreement on Agriculture, there is now a prohibition on agriculture-specific non-tariff measures, and the tariffs on virtually all agricultural products traded internationally are bound in the WTO.

41.2.2 Schedule of Tariff Concessions

Developed country members have agreed to reduce, their tariffs by 36 per cent on average of all agricultural products, with a minimum cut of 15 per cent for any product over a six-year period beginning in 1995. For developing countries, the cuts are 24 and 10 per cent, respectively, to be implemented over ten years. Those developing country Members which bound tariffs at ceiling levels did not, in many cases, undertake reduction commitments. Least-developed country Members were required to bind all agricultural tariffs, but not to undertake tariff reductions.

41.2.3 Tariff Quota Commitments

As part of the tariffication package, WTO Members were required to maintain, for tariffied products, current import access opportunities at levels corresponding to those existing during the 1986-88 base period. Where such “current” access had been less than 5 per cent of domestic consumption of the product in question in the base period, an (additional) minimum access opportunity had to be opened on a most-favoured-nation basis. This was to ensure that in 1995, current and minimum access opportunities combined represented at least 3 per cent of base-period consumption and are progressively expanded to reach 5 per cent of that consumption in the year 2000 (developed country Members) or 2004 (developing country Members), respectively.

41.2.4 The Prohibition of Non-Tariff Border Measures

Article 4.2 of the AoA prohibits the use of agriculture-specific non-tariff measures. Such measures include quantitative import restrictions, variable import levies, minimum import prices, discretionary import licensing procedures, voluntary export restraint agreements and non-tariff measures maintained through state-trading enterprises. All similar border measures other than “normal customs duties” are also no longer permitted.

However, Article 4.2 of the AoA does not prevent the use of non-tariff import restrictions consistent with the provisions of the GATT or other WTO agreements which are applicable to traded goods generally (industrial or agricultural). Such measures include those maintained under balance-of-payments provisions (Articles XII and XVIII of GATT), general safeguard provisions (Article XIX of GATT and the related WTO agreement), general exceptions (Article XX of GATT), the Agreement on the Application of Sanitary and Phytosanitary Measures, the Agreement on Technical Barriers to Trade or other general, non-agriculture-specific WTO provisions.

41.3 DOMESTIC SUPPORT

In WTO terminology, subsidies in general are identified by “Boxes” which are given the colours of traffic lights: green (permitted), amber (slow down — i.e. be reduced), red (forbidden). In agriculture, things are, as usual, more complicated. The Agriculture

Agreement has no Red Box, although domestic support exceeding the reduction commitment levels in the Amber Box is prohibited; and there is a Blue Box for subsidies that are tied to programmes that limit production. There are also exemptions for developing countries.

41.3.1 The Conceptual Framework

A key objective has been to discipline and reduce domestic support while at the same time leaving great scope for governments to design domestic agricultural policies in the face of, and in response to, the wide variety of the specific circumstances in individual countries and individual agricultural sectors. The approach agreed upon is also aimed at helping ensure that the specific binding commitments in the areas of market access and export competition are not undermined through domestic support measures.

The main conceptual consideration is that there are basically two categories of domestic support — support with no, or minimal, distortive effect on trade on the one hand (often referred to as “Green Box” measures) and trade-distorting support on the other hand (often referred to as “Amber Box” measures). For example, government provided agricultural research or training is considered to be of the former type, while government buying-in at a guaranteed price (“market price support”) falls into the latter category. Under the Agreement on Agriculture, all domestic support in favour of agricultural producers is subject to rules. In addition, the aggregate monetary value of Amber Box measures is, with certain exceptions, subject to reduction commitments as specified in the schedule of each WTO Member providing such support.

41.3.2 The Green Box

The AoA sets out a number of general and measure-specific criteria which, when met, allow measures to be placed in the Green Box. These measures are exempt from reduction commitments and, indeed, can even be increased without any financial limitation under the WTO. The Green Box applies to both developed and developing country Members but in the case of developing countries special treatment is provided in respect of governmental stockholding programmes for food security purposes and subsidized food prices for urban and rural poor. The general criteria are that the measures must have no, or at most minimal, trade-distorting effects or effects on production.

Government service programmes

The Green Box covers many government service programmes including general services provided by governments, public stockholding programmes for food security purposes and domestic food aid -as long as the general criteria and some other measure-specific criteria are met by each measure concerned. The Green Box thus provides for the continuation (and enhancement) of programmes such as research, including general research, research in connection with environmental programmes, and research programmes relating to particular products; pest and disease control programmes, including general and product-specific pest and disease control measures; agricultural training services and extension and advisory services etc

Direct payments to producers

The Green Box also provides for the use of direct payments to producers which are not linked to production decisions, i.e. although the farmer receives a payment from the government, this payment does not influence the type or volume of agricultural production (“decoupling”).

41.3.3 Other Exempt Measures

In addition to measures covered by the Green Box, two other categories of domestic support measures are exempt from reduction commitments under the AoA (Article 6). These are certain developmental measures in developing countries and certain direct payments under production-limiting programmes (Blue Box). Furthermore, so-called de minimis levels of support are exempted from reduction. It includes all domestic support measures in favour of agricultural producers that do not fit into any of the above exempt categories are subject to reduction commitments.

41.3.4 Reduction Commitments

The reduction commitments are expressed in terms of a “Total Aggregate Measurement of Support” (Total AMS) which includes all product-specific support and non-product-specific support in one single figure. Members with a Total AMS have to reduce base period support by 20 per cent over 6 years (developed country Members) or 13 per cent over 10 years (developing country Members). There was no requirement in the agreement for reduction commitment if the AMS was 5% for developed countries and 10% for developing and least developed countries.

41.4 EXPORT COMPETITION/SUBSIDIES

The core of the reform programme on export subsidies is the commitments to reduce subsidized export quantities, and the amount of money spent subsidizing exports.

41.4.1 The Conceptual Framework

The proliferation of export subsidies in the years leading to the Uruguay Round was one of the key issues that were addressed in the agricultural negotiations. While under the GATT 1947 export subsidies for industrial products have been prohibited all along, in the case of agricultural primary products such subsidies were only subject to limited disciplines (Article XVI of GATT) which moreover did not prove to be operational.

41.4.2 Reduction Commitments

Developed country members are required to reduce, in equal annual steps over a period of 6 years, the base-period volume of subsidized exports by 21 per cent and the corresponding budgetary outlays for export subsidies by 36 per cent. In the case of developing country Members, the required cuts are 14 per cent over 10 years with respect to volumes, and 24 per cent over the same period with respect to budgetary outlays.

41.5 OTHER ISSUES

The main reduction commitments are in market access, domestic support and export subsidies. But the Agriculture Agreement contains other provisions, including export

restrictions, a “peace clause”, dispute settlement and further negotiations.

41.5.1 Export Restrictions

The AoA requires Members which consider to institute new export restrictions on foodstuffs to give due consideration to the effects of such restrictions on importing Members’ food security. Members, except developing country Members which are not net exporters of the product concerned, must notify the Committee on Agriculture before introducing new export restrictions on foodstuffs and consult with affected Members if so requested.

41.5.2 Peace Clause

The AoA contains a “due restraint” or “peace clause” which regulates the application of other WTO agreements to subsidies in respect of agricultural products (Article 13).

41.5.3 Resolving Disputes

In the case of disputes involving provisions of the AoA, the general WTO dispute settlement procedures apply. Nevertheless, the Agreement also provides for certain mechanisms that can be used by Members to address their concerns without recourse to these procedures.

41.5.4 Continuation Clause

The commitments taken under the AoA and within the Members’ schedules are part of an ongoing process. Already at the conclusion of the Uruguay Round, Members agreed to hold further negotiations on agriculture commencing one year before the end of the six-year implementation period.

Lesson-42 Food Safety Issues under WTO**42.1 INTRODUCTION**

Unlike most manufactured products, agricultural output requires additional care. Apart from the productivity and quality considerations at the production level, there are some necessary precautions that need to be taken when agricultural products are stored and transported. Absence of such cautious measures would have adverse effects on the quality of the product. Thus it is in the interest of the producers as well as the exporters to ensure that certain hygienic and other safety conditions are met. With an increase in the levels of health-safety awareness among the citizens of both developing and developed countries, such practices become imperative for the suppliers of these products. Recognizing the importance of the issue, each country has specified certain norms of processing, packaging and testing, and certain standards of quality that must be maintained. At the international level, WTO has specified some Sanitary and Phyto-Sanitary measures that need to be followed for international trade of food products. The SPS Agreement under the WTO seeks to lay down the minimum sanitary and phyto-sanitary standards that the member countries must achieve. This is to ensure the safety of life and health of humans, animals and plants.

42.2 HISTORICAL PERSPECTIVE TO FOOD SAFETY ISSUES

The issue of Technical Barriers to Trade (TBT) came to forefront during the Tokyo Round (1973 to 1979) of multilateral negotiations. It was during this time that WTO members signed the TBT Agreement. The SPS Agreement came as the following step to the TBT agreement, with a more focused attention on food trade. This was signed during the Uruguay Round of WTO. The primary objective of the agreement was to safeguard plant and animal health via ensuring food safety. It was recognized that government in each country has the right to protect the health of animal, plant and human life. The methodology adopted for this was to regulate the technical requirements of production, inspection mechanisms and labelling of the food products. 'Harmonization' and 'Transparency' were to be the guiding principle of the agreement.

At the Mid-term review of the Uruguay Round, in December 1988, the **priority areas of SPS** were recognized as:

- International harmonization on the basis of the standards developed by the international organizations.
- Development of an effective notification process for national regulations.
- Setting up of a system for the bilateral resolution of disputes.
- Improvement of the dispute settlement process.

- Provision of the necessary input of scientific expertise and judgment, relying on relevant international organizations.

42.3 KEY FEATURES OF SPS

All countries maintain measures to ensure that food is safe for consumers, and to prevent the spread of pests or diseases among animals and plants. These sanitary and phytosanitary measures can take many forms, such as requiring products to come from a disease-free area, inspection of products, specific treatment or processing of products, setting of allowable maximum levels of pesticide residues or permitted use of only certain additives in food. Sanitary (human and animal health) and phytosanitary (plant health) measures apply to domestically produced food or local animal and plant diseases, as well as to products coming from other countries.

42.4 PROTECTION OR PROTECTIONISM?

Sanitary and phytosanitary measures, by their very nature, may result in restrictions on trade. All governments accept the fact that some trade restrictions may be necessary to ensure food safety and animal and plant health protection. However, governments are sometimes pressured to go beyond what is needed for health protection and to use sanitary and phytosanitary restrictions to shield domestic producers from economic competition. Such pressure is likely to increase as other trade barriers are reduced as a result of the Uruguay Round agreements. A sanitary or phytosanitary restriction which is not actually required for health reasons can be a very effective protectionist device, and because of its technical complexity, a particularly deceptive and difficult barrier to challenge.

The Agreement on Sanitary and Phytosanitary Measures (SPS) builds on previous GATT rules to restrict the use of unjustified sanitary and phytosanitary measures for the purpose of trade protection. The basic aim of the SPS Agreement is to maintain the sovereign right of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused for protectionist purposes and do not result in unnecessary barriers to international trade.

42.5 JUSTIFICATION OF MEASURES

The SPS Agreement, while permitting governments to maintain appropriate sanitary and phytosanitary protection, reduces possible arbitrariness of decisions and encourages consistent decision-making. It requires that sanitary and phytosanitary measures be applied for no other purpose than that of ensuring food safety and animal and plant health. In particular, the agreement clarifies which factors should be taken into account in the assessment of the risk involved. Measures to ensure food safety and to protect the health of animals and plants should be based as far as possible on the analysis and assessment of objective and accurate scientific data.

42.6 INTERNATIONAL STANDARDS

The SPS Agreement encourages governments to establish national SPS measures consistent with international standards, guidelines and recommendations. This process is often referred to as "harmonization". The WTO itself does not and will not develop such standards. However, most of the WTO's member governments (132 at the date of drafting) participate

in the development of these standards in other international bodies. The standards are developed by leading scientists in the field and governmental experts on health protection and are subject to international scrutiny and review.

International standards are often higher than the national requirements of many countries, including developed countries, but the SPS Agreement explicitly permits governments to choose not to use the international standards. However, if the national requirement results in a greater restriction of trade, a country may be asked to provide scientific justification, demonstrating that the relevant international standard would not result in the level of health protection the country considered appropriate.

42.7 ADAPTING TO CONDITIONS

Due to differences in climate, existing pests or diseases, or food safety conditions, it is not always appropriate to impose the same sanitary and phytosanitary requirements on food, animal or plant products coming from different countries. Therefore, sanitary and phytosanitary measures sometimes vary, depending on the country of origin of the food, animal or plant product concerned. This is taken into account in the SPS Agreement. Governments should also recognize disease-free areas which may not correspond to political boundaries, and appropriately adapt their requirements to products from these areas. The agreement, however, checks unjustified discrimination in the use of sanitary and phytosanitary measures, whether in favour of domestic producers or among foreign suppliers.

42.8 ALTERNATIVE MEASURES

An acceptable level of risk can often be achieved in alternative ways. Among the alternatives — and on the assumption that they are technically and economically feasible and provide the same level of food safety or animal and plant health — governments should select those which are not more trade restrictive than required to meet their health objective. Furthermore, if another country can show that the measures it applies provide the same level of health protection, these should be accepted as equivalent. This helps ensure that protection is maintained while providing the greatest quantity and variety of safe foodstuffs for consumers, the best availability of safe inputs for producers, and healthy economic competition.

42.9 RISK ASSESSMENT

The SPS Agreement increases the transparency of sanitary and phytosanitary measures. Countries must establish SPS measures on the basis of an appropriate assessment of the actual risks involved, and, if requested, make known what factors they took into consideration, the assessment procedures they used and the level of risk they determined to be acceptable. Although many governments already use risk assessment in their management of food safety and animal and plant health, the SPS Agreement encourages the wider use of systematic risk assessment among all WTO member governments and for all relevant products.

42.10 TRANSPARENCY

Governments are required to notify other countries of any new or changed sanitary and phytosanitary requirements which affect trade, and to set up offices (called "Enquiry Points") to respond to requests for more information on new or existing measures. They also must open to scrutiny how they apply their food safety and animal and plant health regulations. The systematic communication of information and exchange of experiences among the WTO's member governments provides a better basis for national standards. Such increased transparency also protects the interests of consumers, as well as of trading partners, from hidden protectionism through unnecessary technical requirements.

42.11 SPS COMMITTEE

A special Committee has been established within the WTO as a forum for the exchange of information among member governments on all aspects related to the implementation of the SPS Agreement. The SPS Committee reviews compliance with the agreement, discusses matters with potential trade impacts, and maintains close co-operation with the appropriate technical organizations. In a trade dispute regarding a sanitary or phytosanitary measure, the normal WTO dispute settlement procedures are used, and advice from appropriate scientific experts can be sought.

42.12 STANDARD SETTING ORGANISATIONS IN INDIA

Bureau of Indian Standards (BIS): This is a premier organization for setting standards. So far it has set more than 17,000 standards. 150 of these are mandatory and others voluntary. The procedure adopted by BIS is same as in other countries. A suggestion coming from a consumer or an organization is considered by a committee for its viability, before formulation of a final draft. BIS provides various services to the firms. These include product certification, training on ISO 9000 and ISO 14000, list of Indian and international standards for different products and also some general information required by the firm.

Ministry of Food Processing Industry (MFP): As the name suggests, this ministry formulates the procedures and standards for the food processing industries. Thus rules are put together regarding the following thrust areas:

- Material to be used for the machine and equipment that come in contact with food.
- Quality of water used for production and for other purposes like washing and cleaning.
- Requirements of in-house laboratories.
- Assessment of the quality by food technologists.
- Standards pertaining to chemical content, physical characteristics, contaminant levels, and additive levels allowed in food.

Export Inspection Council (EIC): This is an apex agency that facilitates exports of SPS compliant commodities. It also gives advice to the government regarding measures to be taken for enforcement of quality control an inspection. Further, it also makes arrangement for pre-shipment inspection of commodities to ensure compliance of all specified standards. EIC provides three kinds of inspection and certification, they are;

- Consignment-wise inspection.

- In-process quality control. Food Processing Five Sector Project
- Food safety management system based certification.

Codex Alimentarius: This is an international organization that brings together all the interested parties, scientists, technical experts, governments, consumers and industry representatives. The standards set by codex are becoming increasingly acceptable world over, and thus are used as a benchmark by the domestic organizations. They even play a vital role in trade negotiations and settling of disputes.

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