Agribusiness Management, Marketing and WTO 3(3-0)

Definition, Concepts:

Agribusiness include not only that productive piece of land but also the people and firms that provide the inputs (i.e. Seed, chemicals, credit etc.), process the output (i.e. Milk, grain, meat etc.), manufacture the food products (i.e. ice cream, bread, breakfast cereals etc.), and transport and sell the food products to consumers (i.e. restaurants, supermarkets etc.).

Farmers found it increasingly profitable to concentrate on production and began to purchase inputs they formerly made themselves. This trend enabled others to build business that focused on meeting the need for inputs used in production agriculture such as seed, fencing, machinery and so on. These farms involved into the industries that make up the "agricultural inputs sector". Input farms are major part of agribusiness and produce variety of technologically based products that account for approximately 75 per cent of all the inputs used in production agriculture.

At the same time the agriculture input sector was evolving, a similar evaluation was taking place a commodity processing and food manufacturing moved off the farm. The form of most commodities (wheat, rice, milk, livestock and so on) must be changed to make them more useful and convenient for consumers. For ex. consumers would rather buy flour than grind the wheat themselves before backing a cake. They are willing to pay extra for the convenience of buying the processed commodity (flour) instead of the raw agriculture commodity (wheat).

During the same period technological advance were being made in food preservation method. Up until this time the perishable nature of most agriculture commodities meant that they were available only at harvest. Advance in food processing have made it possible to get those commodities all throughout the year. Today even most farm families use purchased food and fiber products rather than doing the processing themselves. The farms that meet the consumers demand for greater processing and convenience also constitute a major part of agribusiness and are referred to as the processing manufacturing sector.

Features and Scope of Agribusiness:

It is apparent that the definition of agriculture had to be expanded to include more than production. Farmers rely on the input industries to provide the products and service they need to produce agricultural commodities. They also rely on commodity processors, food manufactures, and ultimately food distributors and retailers to purchase their raw agricultural commodities and to process and deliver them to the consumer for final sale. The result is the food and fiber system.

The food and fiber system is increasingly being referred to as “agribusiness”. The term agribusiness was first introduced by Davis and Goldberg in 1957.

Agribusiness represents three part system made up of;

(1) The agricultural input sector

(2) The production sector

(3) The processing-manufacturing sector

The capture the full meaning of the term “agribusiness” it is important to visualizes these there sectors as interrelated parts of a system in which the success of each part depends heavily on the proper functioning of the other two. It was already indicated that agribusiness is a complex, system of input sector, production sector, processing manufacturing sector and transport and marketing sector. Therefore, it is directly related to industry, commence and trade, Industry is concerned with the production of commodities and materials while commerce and trade are concerned with their distribution.

Today the business has become very competitive and complex. This is mainly due to changing taste and fashion of the consumers on the one hand, and introduction of substitute and cheaper and better competitive goods, on the other. The old dictum “produce and sells has changed overtime into “produce only what customers want”. In fact, knowing what customers want in never simple. Nevertheless, a farmer operator/farmer manager has to give proper thought to this consideration in order to make his business a successful one. The important requisites for success in a modern business are :

1. **Clean objectives** : Determination of objectives is one of the most essential pre requisite for the success of business. The objectives set forth should be realistic and clearly defined. Then, all the business efforts should be geared to achieve the set objectives. In a way, objectives are destination points for an agribusiness. As a traveler must know here he/she has to reach, i.e. destination similarly business also must know what objectives.
2. **Planning**: In simple words, planning is a pre-determined line of action. The accomplishment of objectives set, to a great extent, depends upon planning itself. It is said that it does not take time to do thing but it takes time to decide what and how to do. Planning is a proposal based on part experience and present trends for future actions. In other words, it is an analysis of a problem and finding out the solutions to solve them with reference to the objective of the farm.

3. **Sound organization:** An organization is the art or science of building up systematical whole by a number of but related parts. Just as human frame is build up by various parts like heart, lever, brain, legs etc. similarly, organization of business is a harmonies combination of men, machine material, money management etc. so that all these could work jointly as one unit, i.e. “business” “the agribusiness”. Organization is, thus such a systematic combination of various related parts for achieving a defined objective in an effective manner.
4. **Research :** As indicated earlier, today the agricultural production philosophy “produce what the consumer want”. “Consumers” behavuiour is influenced by variety of factors like cultural, social, personal and psychological factors. The business needs to know and appreciate these factors and then function accordingly. The knowledge of these factors is acquired through market research. Research is a systematic search for new knowledge. Market research enable a business in finding out new methods of production, improving the quality of product and developing new products as per the changing tastes and wants if the consumers.
5. **Finance :** Finance is said to be the life-blood of business enterprise. It brings together the land, labour, machine and raw materials into production. Agribusiness should estimate its financial requirements adequately so that it may keep the business wheel on moving. Therefore, proper arrangements should be made for securing the required finance for the enterprise.
6. **Proper plant location, layout and size :** The success of agribusiness depends to a great extent on the location. Where it is set up. Location of the business should be convenient from various points of view such as availability of required infrastructure facilities, availability of inputs like raw materials, skill labour, nearer to the market etc.

Objectives of Agribusiness:

The objectives of Agribusiness are as;

- To develop a competitive and sustainable private sector led agribusiness sector, particularly in high value areas of horticulture, livestock and fisheries and thereby support rural development, employment generation and poverty alleviation.
- Increase productivity / reduce yield gaps
- Promote commercially oriented agriculture activity
- Advance high potential sectors: horticulture, livestock and fisheries

Management:

Definition and Concept: Management is defined as, "A process of developing and maintaining an environment by which people (i.e manager, farmers and stakeholders etc.) working together in a group efficiently accomplish agribusiness objectives". Having gone through the above definitions of management, now it can be defined as getting things done through others/subordinates. In other words, it is a process of various functions like planning, organizing, leading and controlling the business operations in such a manner as to achieve the objectives set by the business firm. It consists of all activities beginning from business planning to its actual survival. Hence the business men must take sufficient care in the initial stages to selected suitable location for his business. The sine of the business is also important because the requirement for infrastructural facilities and inputs varies as per the size of the business. The requirement for raw materials, for example, will be les in a smaller sized firm than a larger size firm.

1. **Efficient Management** : One of the reasons for failure of business often attributed to as their poor management or inefficient management. The one man, i.e. the proprietor may not be equally good in all areas of the business. Efficient businessman can make proper use of available resources for achieving the objectives set for the business.

2. **Harmonious relations with the workers:** In an agribusiness organization, the farmer operator occupies a distinct place because he/she is the main living factor among all factors of production. In fact, it is the human factor who makes the use of other non-human factors like land, machine, money etc. Therefore, for successful operation of business, there should be cordial and harmonious relations maintained with the workers/labours to get their full cooperation in achieving business activities.

Management – Nature, types, tasks and responsibilities:

Traditional concept of management restricted management to getting things done by others. According to modern view, management covers wide range of business related activities. It is considered as a process, an activity, a discipline and effort to coordinate control and direct individual and group effort towards attaining the cherished goal of the business. Management may also play the role as science, as an art, as a profession and as a social process.

As a participant in any management programme, one may either be a practicing manager or aspiring to be one. Responsibility and performance are really the key words in defining a manager's role. Performance implies action, and action necessitates taking specific steps and doing the following tasks to produce desired results.

1. Providing purposeful direction to the firm.
2. Managing survival and growth.
3. Maintaining farm's efficiency.
4. Meeting the challenge of increasing competition.
5. Managing for innovation
6. Coping with growing technological sophistication.
7. Maintaining relation with various society segments etc.

An agribusiness is a social institution. Its very existence is dependent upon its harmonious relationship with various segments of the society. This harmonies relationship originates from the farm's positive responsiveness to the various segments and is closely associated with the tasks a manager is expected to perform. The process of evolving this mutual relationship between agribusiness farms and various interest groups begins by acknowledging the existence of the responsibilities of manager. These responsibilities are towards consumers, suppliers, distributors, workers, financiers, government and the society.

Elements of Management: Management is based on following elements;

1. **Objectives:** Objectives are the ends towards which activities are aimed. For each overall goal that one develops, there should be specific, measurable, appropriate, and realistic and time bound (SMART) objectives. These objectives relate to problem statement and desirable anticipated results that represents changes in knowledge, attitude or behaviour of project staff and beneficiaries. The objectives should be used to develop evaluation criteria to ensure that evaluations conducted later in the programme will measure the results that projects intend to achieve.

   Characteristics of Objectives: Are as follows;

   - **i.** Relevant: When objectives fit into the overall general policy or help to solve the problem.
   - **ii.** Feasible: When it is possible to achieve, that is, the resources (land, labour, capital and organization) are available and constraints can be removed.
   - **iii.** Observable: When results can be clearly seen.
   - **iv.** Measurable: An objective is measurable when results can be stated in number i.e Mortality will be deducted by 30% is measurable.

2. **Means:** Are the ways/ tools/ instruments (Government, NGO etc) to be used for successful implementation, monitoring, controlling and evaluating planned activities of resources.
3. **Resources:** Are the inputs (physical, financial or human) used by means for timely and efficient completion of planned activities of resources.
4. **Work Plan:** It shows the sequence of activities which lead to achieve the objectives of business enterprise.

Functions of Management: Managerial activities consists of five functions namely planning, organizing, staffing, directing and controlling as follows;

1. **Planning:** Planning is an attempt to prepare for future by assessing existing resources and capabilities and then determining future line of action with a view to achieve organizational objectives. It means deciding in advance what is to be done, how and where is to be done, who will do it and how results are to be evaluated. Planning is the basic function of management. Proper planning is must for ant business activity. The affairs of any organization are likely to be affected without thought out plan. Planning is necessary to ensure proper utilization of human, financial and physical resources to achieve the objectives of enterprise.

   Planning offers many advantages to an enterprise as follows;

   i. **Planning give direction on objectives**: Activities of an organization get a definite objective to move due to planning without planning everything may be haphazard and purposeless.

   ii. **Planning focuses attention on activities**: Planning helps to focus attention on objectives. This helps in their proper pursuit and fulfillment.

   iii. **Planning helps to affect the change and uncertainty:** Since planning is done with the object of off-setting change and uncertainty, it helps to eliminate risk and avoid loss caused by changing factors.

   iv. **Planning facilitate control:** Managerial control are facilitated by the planning because the actual performance can be compared with planned performance.

   v. **Planning helps in the economical operations:** Planning lays down procedures, policies, objectives and operations. The staff gets a clear-cut idea about an operation, targets and goals.

   vi. **Planning accounts for growth:** Growth of a firm and expansion of its activities are greatly facilitated. This is so because the firm has a clear-cut idea about its future activities. It mat therefore plan to grow. This means that the time and cost of growth are minimum.

vii. **Planning helps to avoid bottlenecks in production:** Since everything is planned scientifically (i.e timely and appropriate provision of land, labour, capital and organization), bottlenecks are avoided and production goes on smoothly.

Steps in Planning: Are as follows;

i. **Establishing objectives:** The first step in planning itself is to establish planning objectives for the entire enterprise and then for each subordinates unit. Objectives specifying the results expected indicate the end points, of what is to be done, where primary emphasis is to be placed and what is to be accomplished by the network of strategies, policies, procedures, rules, budget and programmes. Enterprise objectives should give direction to the nature of all major plans which, by reflecting these objectives, in turn, control the objectives of subordinates departments, and so on, down the line. The objectives of other departments will be better framed, however, if sub-division manager understand the overall enterprise objectives.

ii. **Premising:** A second logical step is to establish and obtain agreement to utilize and disseminate critical planning premises. These are forecast data of a factual nature, applicable to basic policies and existing company plans. Premises, then are planning assumptions, in other words, expected environment of plans in operations. This step leads to one of the major principle of planning, the more individuals charged with planning understand and agree to utilize consistent planning premises, the more coordinated enterprise planning will be. Forecasting is important in premising. Apart from forecasting the basic economical data, forecasting of future, economic and social environments also affects the project, and are equally essential. A superior's plan affecting a subordinate manager's idea of authority becomes premises for the latter's planning. Lack of planning or coordination, by the manager of different sets of premises, can be extremely costly. The use of consistent premises should therefore, be agreed upon. A single standard for the future is necessary for good planning, even though this standard includes several sets of premises with the instruction that different sets of plans be

developed on each. The importance of premising is illustrated by an example where a manager of agribusiness, believing that all departments should develop their own budget and to find that the budget did not fit and he had a complex of inconsistent plans in his hands.

iii. **Determining alternative courses:** The third step in planning is to reach for and examine alternative course of action. There is seldom a plan for which reasonable alternatives do not exist and quite often an alternative that is not obvious proves to be the best. The most common problem is not finding alternatives, but reducing the number of alternatives so that the most promising may be analyzed. Even with mathematical techniques and the computer, there is limit to the number of alternatives that may be examined. It is, therefore, usually necessary for the planner to reduce by preliminary examination the number of alternatives to those promising the most fruitful possibilities or by mathematically eliminating through the process of approximation, the least promising ones.

iv. **Evaluating alternative courses:** Having sought out alternative courses and examined their strong and weak points, the fourth step is to evaluate them by weighing the various factors in the light of premises and goals. One course may appear to be the most profitable but require a large cash outlay and a slow payback: another may be less profitable but involve less risk; still another may better suit the agribusiness organization's long range objectives.

v. **Selecting the course of action:** The fifth planning step , selecting the course of action, is the point at which the plan is adopted to the real point of decision making. Occasionally an analysis and evaluation of alternative courses will disclose that two or more are advisable and the manager may decide to follow several courses rather than the best course.

vi. **Formulating a derivative plans:** At the point where decision is made, planning is seldom complete, a sixth step is to formulate derivative plan. There are almost invariably derivative plans required to support the basic plan.

vii. **Numbering plans by budgeting:** After decisions are made and plans are set the final step to give them meaning is to numberize them to budgets. Each

departments or programme of agribusiness or other enterprise can have its own budgets, usually of expenses and capital expenditure, which tie into the over-all budget. If planned well, budgets become a means of adding together the various plans and also important standards against which planning progress can be measured.

2. Organizing: Organizing is the arrangement and allocation of work, authority and resources in an effective and efficient way. To organize an agribusiness, is to provide it with everything useful to its functioning-land, labour, capital and organization and other managerial techniques on farm. Organizing is an important function of management by management combines the human and material resources. This function must be performed when an activity involves two or more persons. Organizing involves determining the activities to be done, grouping the activities, assigning the grouping activities to be individuals and creating a structure of authority and responsibility among the people to achieve the objectives of the enterprise. Urwich defines organizing as determining what activities are necessary in arranging them in groups which may be assigned to individuals. The process of organization involves the determination of authority and responsibility relationships in the organization.

2. **Staffing:** It involves filling positions in agribusiness. It is done by identifying work place requirements, locating, recruiting, selecting, placing, appraising, , planning the careers of, compensating or training or otherwise develop both candidates and current job holders to accomplish their tasks efficiently. After planning and organizing the total activities to be done, management is in position to know that manpower requirements of agribusiness enterprise at different levels in the organization structure. After determining the number and type of personnel to be selected to fill different jobs, management starts with recruiting, selecting and training the people to fulfill the requirements of agribusiness enterprise depending upon size, nature and type of enterprise. In short staffing function includes the process by which the right person is placed in a right organizational position.
3. **Directing:** Managers have stimulate action by giving orders to sub ordinates and by supervising them as they go with their work. Directing was identified by

Hanery Fayol with Command G.R. Terry identified directing as moving to action and supplying stimulating power to group of persons. Directing embraces three important components;

- **i.** Issuing of orders and instructions to the subordinates.
- **ii.** Guiding and teaching the subordinates the proper method of doing work.
- **iii.** Supervising the subordinates to ensure that these works conforms to the plans.

Thus directing process involves the following functions;

a. **Leadership:** Leadership is the process by which a manger guides and influences the work of others in choosing and attaining the specified goals by mediating between the individuals and organization in such a manner that both will obtain maximum satisfaction.

b. **Communication:** A manager who is providing leadership to his subordinates has to tell them what they are required to do, how to do it and when to do it. He has to create an understanding in the minds of subordinates of the work to be done. This is done by the process of communication. Communication is the transmission, receipt and understanding of ideas, instructions or information.

c. **Motivation:** It means inspiring the personnel with zeal to work and cooperate for the accomplishment of common objectives. It is function of manager to motivate the people working under him to perform the work assigned effectively and efficiently.

d. **Supervision:** It is an essential element in direction process. The manager has o see to it that subordinates work effectively to accomplish the tasks that he has entrusted them to do. Supervision is the process by which conformity between planned and actual results is maintained. It is essential to ensure that subordinates are doing as they are directed.

Concept of Directing: According to Koontz and O'Donnel Directing is a complex function that include all those activities which are designed to encourage subordinates to work effectively both in the short and long run. Directing is regarded as the dynamic function of the management because it infuses life into

plans as well as organization. Direction is the inter-personal aspect of managing by which subordinates are led to understand and contribute effectively and efficiently to attainment of enterprise objectives. Directing is the heart of management process because it is concerned with initiating action. Management is the art of getting things through other people and to do that management plans and organizes and thereafter stimulate action by giving orders to subordinates.

Salient Features of Directing: Following are some of the important features of directing;

i. **Directing is a universe function.** The work of directing will have to be performed at all levels of management hierarchy. It is an essential dynamics activity and every executive has to motivate, lead, communicate and supervise his subordinates to get the work done for the accomplishment of organizational objectives.

ii. **Directing is a dynamic function.** It is continuous and dynamic function. With changes in plans and organizational relationships, the executive will invariably have to change the methods and techniques of direction.

iii. **It integrates different management functions.** Directing provides meaning to all basic functions of management and provides material for control. Directing links the various management functions viz planning, organizing and staffing with the controlling functions.

iv. **It acts as the nucleus of all operations.** Directing is the process around which all other activities and performance revolve. Directing is the nucleus around which the practices of management is built. As a performance oriented function it ensures the continuity of all operations.

v. **It essentially involves human relations.** Direction is concerned with relationships between people working in the organization. Executive must strike a balance between personal interest of the employees and the organization.

Principles of Directing: The executive should try his best to motivate subordinates by leading them to attain the enterprise objectives at minimum cost. Otherwise direction would prove ineffective and futile. Directing function of management can be sound and effective only when it is built on accepted principles. The basic principles are;

i. **Unity of command.** The management must ensure that a subordinate receive orders from and be accountable to only one superior at a time to avoid division of accountability and also conflicting orders.

ii. **Direct supervision:** Executive for an objective method of supervision should have direct contact with his subordinates in addition to formal contact. Direct supervision is necessary for the following reasons;

   a. To infuse the sense of participation.

   b. To boost employee morale.

   c. To develop effective feedback of information.

iii. **Direct Techniques:** An executive had to depend on appropriate techniques of direction depending upon the need of the hour and situation.

iv. **Direct Managerial Communication:** Direct flow of information that encourages two way communications is the most effective means of direction. Effective direction should always give priority to direct flow of information.

v. **Effective Leadership:** Effective leadership is the pre-requisite for effective direction. The leader must persuade and motivate subordinates for achieving maximum performance.

vi. **Effective Participative Management:** Direction can be effective and fruitful only when it is democratic and participative in nature. Direction can be very effective when there is harmony between the objectives of employees and the organization. Direction is always given through a formulize process of delegation, communication of orders. The order may be written or verbal or general or operational or definite or procedural.

4. **Controlling:** It is measuring and correcting of activities of subordinates to ensure that events conform to plans. It measures performance against goals and plans,

shows where negative deviation exist, by putting in motion actions to correct deviations, help ensure the accomplishment of plans. Plans guide managers in the use of resources to accomplish specific goals, then activities are checked to determine whether they conform to the plans. Controls are indicators of performance and set up to help measure progress against plan. The supervisor has to operate the controls and he should be able to set up, operate and adjust the controls according to need. Before setting up or designing controls is to have an assessment of the overall assignments and determine which activities are more important. The overall areas which are important and controls have to be set up are manpower, material, quality of work, quantity of work, time, space and methods. Once the areas of controls have been established the supervisor must find or set up standard for each activity in each area. Standards are the measuring devices for the activity. A supervisor wishes to set up standard for production work. First he will like to review the past records and determine what has been accomplished in the past under conditions similar to present conditions. Supervisor needs certain indicators which tell him how well his team is doing in relation to standards as frequently as possible. These indications must express a relationship between the standard and performance.

Forms of Business Organizations:

Introduction: Business concerns are established with the objective of making profits. They can be established either by one person or by a group of persons in the private sector by the government or other public bodies in the public sector. A business started by only one person is called sole proprietorship. The business started by a group of persons can be either a Joint Hindu Family or Partnership or Joint Stock Company or a Co-operative form of organization.

Thus there are three legal forms of agribusiness organization

1. Sole Proprietorship
2. Partnership Firm
3. Joint Stock Company or Corporation

Forms of business organization are legal forms in which a business enterprise may be organized and operated.

These forms of organization refer to such aspects as ownership, risk bearing, control and distribution of profit. Any one of the above mentioned forms may be adopted for establishing a business, but usually one form is more suitable than other for a particular enterprise. The choice will depend on various factors like the nature of business, the objective, the capital required, the scale of operations, state control, legal requirements and so on.

Out of the forms of private ownership listed above the first three forms (1, 2, and 3) may be described as non corporate and the remaining (4 and 5) as corporate forms of ownership. The basic difference between these two categories is that a non-corporate form of business can be started without registration while a corporate form of business cannot be set up without registration under the laws governing their functioning.

Characteristics of an ideal form of organization

Before we discuss the features, merits and demerits of different forms of organization, let us know the characteristics of an ideal form of organization. The characteristics of an ideal form of organization are found in varying degrees in different forms of organization. The entrepreneur, while selecting a form of organization for his business, should consider the following factors.

- **Ease of formation:** It should be easy to form the organization. The formation should not involve many legal formalities and it should not be time consuming.

- **Adequacy of Capital**: The form of organization should facilitate the raising of the required amount of capital at a reasonable cost. If the enterprise requires a large amount of capital, the preconditions for attracting capital from the public are a)

safety of investment b) fair return on investment and c) transferability of the holding.

- **Limit of Liability**: A business enterprise may be organized on the basis of either limited or unlimited liability. From the point of view of risk, limited liability is preferable. It means that the liability of the owner as regards the debts of the business is limited only to the amount of capital agreed to be contributed by him. Unlimited liability means that even the owners' personal assets will be liable to be attached for the payment of the business debts.

- **Direct relationship between Ownership, Control and Management**: The responsibility for management must be in the hands of the owners of the firm. If the owners have no control on the management, the firm may not be managed efficiently.

- **Continuity and Stability**: Stability is essential for any business concern. Uninterrupted existence enables the entrepreneur to formulate long-term plans for the development of the business concern.

- **Flexibility of Operations**: Another ideal characteristic of a good form of organization is flexibility of operations. Changes may take place either in market conditions or the states' policy toward industry or in the conditions of supply of various factors of production. The nature of organization should be such as to be able to adjust itself to the changes without much difficulty.

Sole Proprietorship

Meaning: A sole proprietorship or one man's business is a form of business organization owned and managed by a single person. He is entitled to receive all the profits and bears all risk of ownership.

Features: The important features of sole proprietorship are:

1. The business is owned and controlled by only one person.
2. The risk is borne by a single person and hence he derives the total benefit.
3. The liability of the owner of the business is unlimited. It means that his personal assets are also liable to be attached for the payment of the liabilities of the business.
4. The business firm has no separate legal entity apart from that of the proprietor, and so the business lacks perpetuity.
5. To set up sole proprietorship, no legal formalities are necessary, but there may be legal restrictions on the setting up of particular type of business.
6. The proprietor has complete freedom of action and he himself takes decisions relating to his firm.
7. The proprietor may take the help of members of his Family in running the business.

Advantages

1. **Ease of formation**: As no legal formalities are required to be observed.
2. **Motivation**: As all profits belong to the owner, he will take personal interest in the business.
3. **Freedom of Action**: There is none to interfere with his authority. This freedom promotes initiative and self-reliance.
4. **Quick Decision**: No need for consultation or discussion with anybody.
5. **Flexibility**: Can adapt to changing needs with comparative ease.
6. **Personal Touch**: comes into close contact with customers as he himself manages the business. This helps him to earn goodwill.
7. **Business Secrecy**: Maintaining business secrets is very important in today's competitive world.
8. **Social Utility**: Encourages independent living and prevents concentration of economic power.

Disadvantages

1. **Limited resources**: One man's ability to gather capital will always be limited.
2. **Limited Managerial Ability**.
3. **Unlimited Liability**: Will be discouraged to expand his business even when there are good prospects for earning more than what he has been doing for fear of losing his personal property.
4. **Lack of Continuity**: Uncertain future is another handicap of this type of business. If the sole proprietor dies, his business may come to an end.
5. **No Economies of Large Scale**: As the scale of operations are small, the owner cannot secure the economies and large scale buying and selling. This may raise the cost of production.

Suitability of Sole Proprietorship Form

From the discussion of the advantages and disadvantages of sole proprietorship above, it is clear that this form of business organization is most suited where:

1. The amount of capital is small
2. The nature of business is simple in character requiring quick decisions to be taken
3. Direct contact with the customer is essential and
4. The size of demand is not very large.

These types of conditions are satisfied by various types of small business such as retail shops, legal or medical or accounting profession, tailoring, service like dry cleaning or vehicle repair etc. hence sole proprietor form of organization is mostly suitable for these lines of businesses. This form of organization also suits those individuals who have a strong drive for independent thinking and highly venturous some in their attitude.

Partnership Form of Organization

Generally when a proprietor finds it's difficult to handle the problems of expansion, he thinks of taking a partner. In other words, once a business grows beyond the capacity of a sole proprietorship and or a Joint Hindu Family, it becomes unarguably necessary to form partnership. It means that partnership grows out of the limitations of one-man business in terms of limited financial resources, limited managerial ability and unlimited risk. Partnership represents the second stage in the evolution of ownership forms.

In simple words, a Partnership is an association of two or more individuals who agree to carry on business together for the purpose of earning and sharing of profits. However a formal definition is provided by the Partnership Act of 1932.

Definition

Section 4 of the Partnership Act, 1932 defines Partnership as "the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all"

Features of Partnership

1. **Simple procedure of formation**: the formation of partnership does not involve any complicated legal formalities. By an oral or written agreement, a Partnership can be created. Even the registration of the agreement is not compulsory.
2. **Capital**: The capital of a partnership is contributed by the partners but it is not necessary that all the partners should contribute equally. Some may become partners without contributing any capital. This happens when such partners have special skills, abilities or experience. The partnership firm can also raise additional funds by borrowing from banks and others.
3. **Control:** The control is exercised jointly by all the partners. No major decision can be taken without consent of all the partners. However, in some firms, there may partners known as sleeping or dormant partners who do not take an active part in the conduct of the business.
4. **Management:** Every partner has a right to take part in the management of the firm. But generally, the partnership Deed may provide that one or more than one partner will look after the management of the affairs of the firm. Sometimes the deed may provide for the division of responsibilities among the different partners depending upon their specialization.
5. **Duration of partnership**: The duration of the partnership may be fixed or may not be fixed by the partners. In case duration is fixed, it is called as "partnership for a fixed term. When the fixed period is over, the partnership comes to an end.
6. **Unlimited Liability**: The liability of each partner in respect of the firm is unlimited. It is also joint and several and, therefore any one of the partner can be asked to clear the firm's debts in case the assets of the firm are inadequate for it.

7. **No separate legal entity**: The partnership firm has no independent legal existence apart from that of the persons who constitute it. Partnership is dissolved when any partner dies or retires. Thus it lacks continuity.
8. **Restriction on transfer of share**: A partner cannot transfer his share to an outsider without the consent of all the other partners.

Advantages

1. **Ease of formation**: partnership can be easily formed without expense and legal formalities. Even the registration of the firm is not compulsory.
2. **Large resources**: when compared to sole-proprietorship, the partnership will have larger resources. Hence, the scale of operations can be increased if conditions warrant it.
3. **Better organization of business**; as the talent, experience, managerial ability and power of judgment of two or more persons are combined in partnership, there is scope for a better organsation of business.
4. **Greater interest in business**: as the partners are the owners of the business and as profit from the business depends on the efficiency with which they manage, they take as much interest as possible in business.
5. **Prompt decisions**: as partners meet very often, they take decisions regarding business policies very promptly. This helps the firm in taking advantage of changing business conditions.
6. **Balance judgement**: as partners possesses different types of talent necessary for handling the problems of the firm, the decisions taken jointly by the partners are likely to be balanced.
7. **Flexibility**: partnership is free from legal restriction for changing the scope of its business. The line of business can be changed at any time with the mutual consent of the partners. No legal formalities are involved in it.
8. **Diffusion of risk**; the losses of the firm will be shared by all the partners. Hence, the share of loss in the case of each partner will be less than that sustained in sole proprietorship.
9. **Protection to minority interest**: important matters like change in the nature of business, unanimity among partners is necessary hence, the minority interest is protected.
10. **Influence of unlimited liability**: the principle of unlimited liability helps in two ways. First, the partners will be careful in their business dealings because of the fear of their personal properties becoming liable under the principle of unlimited liability. Secondly, it helps the firm in raising loans for the business as the financers are assured of the realization of loans advanced by them.

Disadvantages.

1. **Great risk**; as the liability is joint and several, any one of the partners can be made to pay all the debts of the firm. This affects his share capital in the business and his personal properties.
2. **Lack of harmony**: some frictions, misunderstanding and lack of harmony among the partners may arise at any time which may ultimately lead to the dissolution.
3. **Limited resources**: because of the legal celing on the maximum number of partners, there is limit to the amount of capital that can be raised.
4. **Tendency to play safe**: because of the principle of unlimited liability, the partners tend to play safe and pursue unduly conservative policies.
5. **No legal entity**: the partnership has no independent existence apart from that of the persons constituting it, i.e it is not a legal entity.
6. **Instability**: the death, retirement or insolvency of a partner leads to the dissolution of the partnership. Further even any one partner if dissatisfied with the business, can bring about the dissolution of partnership. Hence partnership lacks continuity
7. **Lack of public confidence**: no legal regulations are followed at the time of the formation of partnership and also there is no publicity given to its affairs. Because of these reasons, a partnership may not enjoy public confidence.

Sustainability:

The advantages and drawbacks of partnership stated above indicate that the partnership form tends to be useful for relatively small business, such as retail trade, mercantile houses of moderate size, professional services or small scale industries and agency business. But when compared to sole proprietorship partnership is suitable for a business bigger in size and operations.

Joint Stock Company or Corporation:
Corporation is body corporate created by an act of Parliament or Legislature and notified by the name in the official gazette of the central or state government. Public sector is generally recognized as a “model employer” providing fair wages, good working conditions and amenities and recognizing the rights of workers.

Objectives of Corporation: Are as follows;

- To promote rapid economic development by filling critical gaps in the agriculture and industrial structure.
- To provide basic infra-structural facilities for the growth of primary, secondary and tertiary sectors.
- To understand economic activity such as balanced provision of necessities of life (i.e education, health, food) strategically important for smooth functioning and productive growth.
- To reduce disparities in business return.
- To avoid concentration of economic/ financial power in a few hands.

- To exercise social control and regulation of long term capital through financial institutions.
- To enhance the employment opportunities by heavy investment in industry.
- To increase exports of primary goods and earn foreign exchange to ease the pressure of balance of payment.

Need of Corporation: At the time of independence, the planners believed that large scale investment by the State would be necessary to achieve accelerated and balance economic development. Achievement of objectives such as creation of industrial base, poverty alleviation, and equitable distribution of income and removal of regional imbalances required as practical role by the State.

Advantages of Corporation: Are as follows;

- The control of corporation is direct and centralized, so it is likely to be effective.
- As the financial operations of corporations are subject to ministerial sanction, budget accounting and audit control, the risk of misuse of money to relatively less.
- The revenue of money is likely to increase since the earning of corporation is credited into the treasury; the tax burden on the continuity thereby becomes lighter.

Disadvantages of Corporation: Are as follows;

- Due to excessive centralization of control contrary to flexibility initiative and prompt action would become hurdle in the smooth and successful operation of corporations.
- Since it has no power to utilize the revenues, there will be practically no incentives to maximize its earnings.
- Due to absence of competition and profit motives, losses incurred by the corporations are not taken seriously.
- Losses incurred by the corporation are recovered from treasury, the amount of loss which may necessitate additional taxation.

Multinational Corporation: A multinational corporation (MNC) is a corporation or an enterprise that manages production or delivers services in more than one country. It can also be referred as an international corporation. The International Labour Organization (ILO) has defined as MNC as a corporation which has its management headquarters in one country known as the home country and operates in several other countries known as host countries. The first modern MNC is generally thought to be the Dutch East India Company. Nowadays many corporations have offices, branches or manufacturing plants in different countries than where their original and main headquarter is located. This often results in very powerful corporations that have budgets that exceed some national GDPs. Multinational corporations can have a powerful influence in local economies as well as the world economy and play an important role in international relations and globalization. It may seem strange that a corporation can decide to do business in a

different country, where it doesn't know the laws, local customs or business practices. One reason is that the use of the market for coordinating the behaviour of agents located in different countries is less efficient than coordinating them by a multinational enterprise as an institution. The additional costs caused by the entrance in foreign markets are of less interest for the local enterprise.

Financial Management: Financial Management is concerned with anticipation, acquisition and allocation of funds. It involves managerial activities concerned with the procurement and utilization of funds for business purpose. There are mainly two functions; Financing and budgeting.

Finance: In our present day economy, "finance" is defined as the provision of money at the time when it is required. Every enterprise, whether big, medium of small, needs finance to carry on its operations and to achieve its targets. Finance is so indispensable today that it is the lifeblood of an enterprise. Without adequate finance, no enterprise can possibly accomplish its objectives. "finance" is the life blood and the nervous system of any business organization. Just as circulation of blood, is necessary in the human body to maintain life. Finance is necessary in the business org. for smooth running of the business.

Sources of finance/ capital formation/ capital accummulation:

a) **Creation of savings**: Individuals or groups intend to create savings by developing and manintinaing power and will to save.

b) **Mobilization of savings**: Saved amount must be mobilized and transferred to enterpreurs/ businessmen for appropriate investment.

c) **Investment of savings in real capital**: Preference must be assured for the investment in industrial sector.

d) **Foreign investment**: It comprises followings

i. Direct Foreign investment.

ii. Loan or grant from foreign nations.

iii.Loan from international funding agencies i.e IMF, World Bank.

e) **Taxes**. It is one the most important source of public finance.

f) **Prices**. Increase price of certain products bring revenue.

g) **Rates.** It is also a source of fund

h) **Fines and penalities**: Also considered as sources of fund.

Valuation: It is central issue of finance.

Time Value of Money:

Time Value of Money (TVM) is an important concept in financial management. It can be used to compare investment alternatives and to solve problems involving loans, mortgages, leases, savings, and annuities. TVM is based on the concept that a dollar that you have today is worth more than the promise or expectation that you will receive a dollar in the future. Money that you hold today is worth more because you can invest it and earn interest. After all, you should receive some compensation for foregoing spending. For instance, you can invest your dollar for one year at a 6% annual interest rate and accumulate $1.06 at the end of the year. You can say that the future value of the dollar is $1.06 given a 6% interest rate and a one-year period. It follows that the present value of the $1.06 you expect to receive in one year is only $1. A key concept of TVM is that a single sum of money or a series of equal, evenly-spaced payments or receipts promised in the future can be converted to an equivalent value today. Conversely, you can determine the value to which a single sum or a series of future payments will grow to at some future date. You can calculate the fifth value if you are given any four of: Interest Rate, Number of Periods, Payments, Present Value, and Future Value.

Present value of a future sum: Present value is the current value of payment that will be received in future. While discounting is the process of determining the present value from known future payment.

$PV = FV/ (1+i)^n$

Where

PV = Present value of dollar

FV = Future value of dollar

i = Interest rate per time period

n= number of time period

For example, if you can go backwards too. If someone will give you $1000 in 5 years. How much money should you give me now to make it fair to me. You think a good interest rate would be 6% (You just made that number up). (i=.06)

- $\mathbf{FV= PV (1 + i)^N}$
- $\$1000 = PV (1 + .06)^5$
- $\$1000 = PV (1.338)$
- $\$1000 / 1.338 = PV$
- $\$ 747.38 = PV$

Present value is an amount today that is equivalent to a future payment, or series of payments, that has been discounted by an appropriate interest rate. The future amount can be a single sum that will be received at the end of the last period, as a series of

equally-spaced payments (an annuity), or both. Since money has time value, the present value of a promised future amount is worth less the longer you have to wait to receive it.

Future value of a present sum: Future value is any amount of money, will be worth if it earns interest for a specific period of time. Compounding is the process of determining the future value from the known present value or principal.

$FV = PV\ (1+i)^n$

Where

FV = Future value of dollar

PV = Principal or present value of dollar

i = Interest rate per time period

n= number of time period

For example, if someone give you 100 dollars. You take it to the bank. They will give you 10% interest per year for 2 year.

So, the Present Value = $ 100

While the Future Value = $121.

Future value is the amount of money that an investment with a fixed, compounded interest rate will grow to by some future date. The investment can be a single sum deposited at the beginning of the first period, a series of equally-spaced payments (an annuity), or both. Since money has time value, we naturally expect the future value to be greater than the present value. The difference between the two depends on the number of compounding periods involved and the going interest rate.

Interest. It is a charge for borrowing money, usually stated as a percentage of the amount borrowed over a specific period of time. Simple interest is computed only on the original amount borrowed. It is the return on that principal for one time period. In contrast, compound interest is calculated each period on the original amount borrowed plus all unpaid interest accumulated to date. Compound interest is always assumed in TVM problems.

Time and Risk: Each assset is defined by its cash flow.

Time	0	1	2
Cash outflow	CF0	0	0

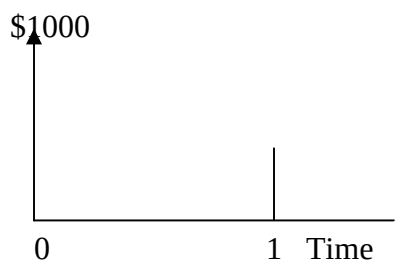
Cash inflow	0	CF1	CF2
Net cash flow	-CF0	CF1	CF2

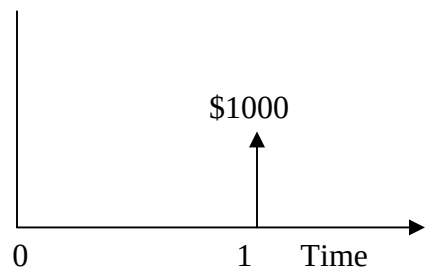
Hence value of an asset = value of a cash flow

Value of investment= Value ({CF0, CF1, CF2, ---})

Charcateristics of cashflow: Time and risk

Time: Example. $1000 today versus $1000 next year





Risk: Risk means you have the possibility of losing some, or even all, of our original investment.

Example $1000 for sure vs $0 and $2000 with equal odds

--------$1000

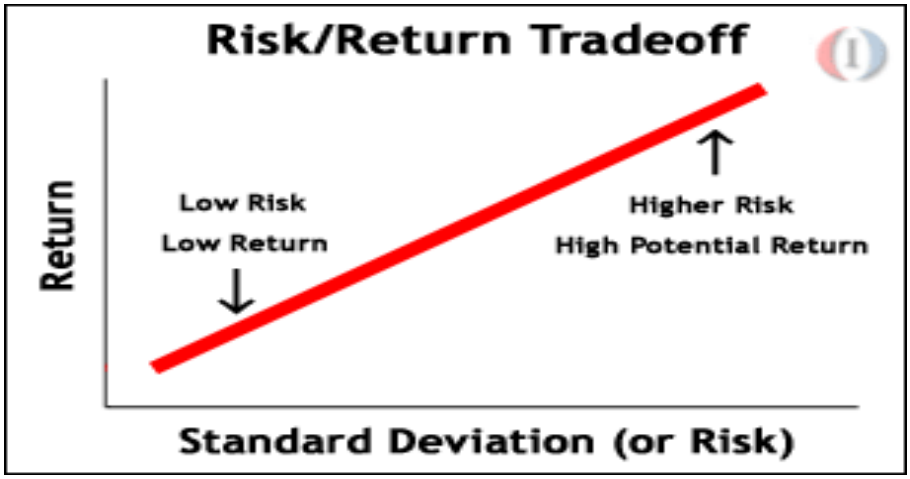
--------$1000

-------- $2000

-------- $0

Time and uncertainty are the two elements in finance.

The risk/return tradeoff: Risk/ return trade off is the balance between the desire for the lowest possible risk and the highest possible return. This is demonstrated graphically in the chart below. A higher standard deviation means a higher risk and higher possible return.



A common misconception is that higher risk equals greater return. The risk/return tradeoff tells us that the higher risk gives us the *possibility* of higher returns. There are no guarantees. Just as risk means higher potential returns, it also means higher potential losses.

Financial Market: It is market where financial assets are traded. A market where cash flow availalable to firm.

Types of Financial Markets: Are as

1) Primary and Secondary Market

2) Dealer and Aunction Market

3) Listed vs Over the Counter Market

Primary Market: The market in which securities (stock an bonds) are sold by the company.

Secondary Market: The market where securities that have already been issued are traded between investors.

Dealer Market: They buy and sell for themselves, at their own risk.

Auction Market: They differ from dealer market from two ways;

i. Trading in a given auction exchange takes place at a single site on the floor of exchange.
ii. Transaction prices of shares are communicated almost immediately to the public.

Listed Market: Stocks that trade on organized exchange (or market) are said to be listed on that exchange.

Over the Counter Market: Dealer in stock and bonds

We assume the financial market is perfect as; 1) A rich set of securtities being traded. 2) Security contacts are reforceable. 3) Free access 4)Competitive trading process 5) no frictions/ constriants in trading.

Finacial Institutions: Companies that specialize in financial matters

- Banks. Commercial and investment, credit union, savings, loans.
- Insurance companies:
- Brokerage firms.

Analysis of Financial Statements: Financial statement consists of balance sheet, income statement, fund flow etc.

A) **Balance Sheet:** It is firm recorded list of assets, liabities and owner's equity in a reporting date.

Assets = Liabities + Owner's Equity

B) **Income Statement:** It is firm recorded earnings and expenses in a specific period of time.

C) **Fund Flow**: Analysis of sources and application of funds.

D) **Break Even Point**: A point in the level of production, when there is no profit or loss.

E) **Ratio Analysis**: Ratio analysis is measurement of proportion between two or more figures in the financial statement.

Current Ratio= Current assets/ current liabiliaties

F) **Benefit Cost Analysis (B/C Ratio):** Analysis used to compare benefits with cost.

B/C =1 Business is marginal or it simply covers the cost of production

B/C < 1 Business is not worthwhile, not feasible, not workable, not economical to continue production

B/C > 1 Business is worthwhile, feasible, workable or economical to continue production

Internal Rate of Return (IRR): That rate of discounting future which equates initial cost with sum of future discounted net benefits.

IRR is calculated as Cash inflow – cash outflow = 0

Or Cash inflow = Cash outflow

i.e $ 5000 = $ 5000

Net Present Value (NPV): The difference between casinflow and cashoutflow is called as net present value

When Cash inflow – Cash outflow = NPV

i.e $ 4000 - $1000 = $ 3000 (NPV)

Supply Chain Management:

Supply chain management (SCM) is the management of a network of interconnected businesses involved in the provision of product and service packages required by the end customers in a supply chain.

A supply chain, as opposed to supply chain management, is a set of organizations directly linked by one or more of the upstream and downstream flows of products, services, finances, and information from a source to a customer. Supply chain management software includes tools or modules used to execute supply chain transactions, manage supplier relationships and control associated business processes.

Supply chain management must address the following problems:

- **Distribution Network Configuration**: number, location and network missions of suppliers, production facilities, distribution centers, warehouses, cross-docks and customers.
- **Distribution Strategy**: questions of operating control (centralized, decentralized or shared); delivery scheme, e.g., direct shipment, pool point shipping, cross docking, DSD (direct store delivery), closed loop shipping; mode of transportation, e.g., motor carrier, including truckload, LTL, parcel; railroad; intermodal transport, including TOFC (trailer on flatcar) and COFC (container on flatcar); ocean freight; airfreight; replenishment strategy (e.g., pull, push or hybrid); and transportation control (e.g., owner-operated, private carrier, common carrier, contract carrier, or 3PL).
- **Trade-Offs in Logistical Activities**: The above activities must be well coordinated in order to achieve the lowest total logistics cost. Trade-offs may increase the total cost if only one of the activities is optimized. For example, full truckload (FTL) rates are more economical on a cost per pallet basis than less than truckload (LTL) shipments. If, however, a full truckload of a product is ordered to reduce transportation costs, there will be an increase in inventory holding costs which may increase total logistics costs. It is therefore imperative to take a

systems approach when planning logistical activities. These trade-offs are key to developing the most efficient and effective Logistics and SCM strategy.

- **Information**: Integration of processes through the supply chain to share valuable information, including demand signals, forecasts, inventory, transportation, potential collaboration, etc.
- **Inventory Management:** Quantity and location of inventory, including raw materials, work-in-process (WIP) and finished goods.
- **Cash-Flow:** Arranging the payment terms and methodologies for exchanging funds across entities within the supply chain.

Supply chain execution means managing and coordinating the movement of materials, information and funds across the supply chain. The flow is bi-directional.

Activities/functions:

Supply chain management is a cross-function approach including managing the movement of raw materials into an organization, certain aspects of the internal processing of materials into finished goods, and the movement of finished goods out of the organization and toward the end-consumer. As organizations strive to focus on core competencies and becoming more flexible, they reduce their ownership of raw materials sources and distribution channels. These functions are increasingly being outsourced to other entities that can perform the activities better or more cost effectively. The effect is to increase the number of organizations involved in satisfying customer demand, while reducing management control of daily logistics operations. Less control and more supply chain partners led to the creation of supply chain management concepts. The purpose of supply chain management is to improve trust and collaboration among supply chain partners, thus improving inventory visibility and the velocity of inventory movement. Several models have been proposed for understanding the activities required to manage material movements across organizational and functional boundaries. SCOR is a supply chain management model promoted by the Supply Chain Council. Another model is the SCM Model proposed by the Global Supply Chain Forum (GSCF). Supply chain activities can be grouped into strategic, tactical, and operational levels. The CSCMP has

adopted The American Productivity & Quality Center (APQC) Process Classification Framework[SM] a high-level, industry-neutral enterprise process model that allows organizations to see their business processes from a cross-industry viewpoint.

Resource Constriants:

The most important resources that project managers have to plan and manage on day-to-day basis are people, machines, materials, and working capital. Obviously, if these resources are available in abundance then the project could be accelerated to achieve shorter project duration. On the other hand, if these resources are severely limited, then the result more likely will be a delay in the project completion time. Depending on the type of resources, the costs of providing an abundance of such resources to accelerate project completion time can be very high. However, if resources are readily available and excess premiums are not incurred to use them on the project, then project cost should be low, as some project costs are resource related while others are likely to be time dependent. In general, projects with a shorter duration are less expensive. The longer the duration of the project, the higher will be overall project cost due to the increase in fixed costs such as overheads. The reality is that as long as the work on a project is ongoing it will continue to draw resources into its orbit. Whatever the parameters of the project, it is unlikely that the relationship between cost and duration is linear. For any particular project, the decision to place the project on the curve between the point of least duration with its associated higher resource requirements and a point of increased duration with its associated lower resource requirements depends on the particular parameters of the project.

When a project plan is first devised it is likely that the plan will identify peaks of resource requirements. However, given the finite nature of resource availability, it may be impractical to meet such peak resource needs. Ideally, there should be an even demand for resources over the entire project duration, with a smooth increase at the beginning of a project and a smooth decrease at the end. Given the limited nature of resources, thoughtful consideration should be given to the project resource requirements; the project plan should be refined when necessary so that it is practical. The process of refining the plan to effectively manage and schedule resources (sometimes referred to as resource modeling) comprises four major stages: resource definition, resource allocation, resource aggregation, and resource leveling (which includes resource smoothing). In the subsequent sections we will discuss of these major stages.

Optimum Factor Combination:

Definition:

In the long run, all factors of production can be varied. The profit maximization firm will choose the least cost combination of factors to produce at any given level of output. The **least cost combination or the optimum factor combination** refers to the combination of factors with which a firm can produce a specific quantity of output at the lowest possible cost.

Explanation:

There are two methods of explaining the optimum combination of factor:

(i) The marginal product approach.

(ii) The isoquant / isocost approach.

These two approaches are now explained in brief:

(i) The Marginal Product Approach:

In the long run, a firm can vary the amounts of factors which it uses for the production of goods. It can choose what technique of production to use, what design of factory to build, what type of machinery to buy. The profit maximization will obviously want to use that mix of factors of combination which is least costly to it. In search of higher profits, a firm substitutes the factor whose gain is higher than the other. When the last rupee spent on each factor brings equal revenue, the profit of the firm is maximized. When a firm uses different factors of production or least cost combination or the optimum combination of factors is achieved when:

Formula:

$$\frac{Mpp_a}{P_a} = \frac{Mpp_b}{P_b} = \frac{Mpp_c}{P_c} = \frac{Mpp_n}{P_n}$$

In the above equation a, b, c, n are different factors of production. Mpp is the marginal physical product. A firm compares the Mpp / P ratios with that of another. A firm will reduce its cost by using more of those factors with a high Mpp / P ratios and less of those with a low Mpp / P ratio until they all become equal.

(ii) The Isoquant / Isocost Approach:

The least cost combination of-factors or producer's equilibrium is now explained with the help of iso-product curves and isocosts. The optimum factors combination or the least cost combination refers to the combination of factors with which a firm can produce a specific quantity of output at the lowest possible cost. As we know, there are a number of combinations of factors which can yield a given level of output. The producer has to choose, one combination out of these which yields a given level of output with least possible outlay. The least cost combination of factors for any level of output is that where the iso-product curve is tangent to an isocost curve. The analysis of producers equilibrium is based on the following assumptions.

Assumptions of Optimum Factor Combination:

The main assumptions on which this analysis is based areas under:

(a) There are two factors X and Y in the combinations.

(b) All the units of factor X are homogeneous and so is the case with units of factor Y.

(c) The prices of factors X and Y are given and constants.

(d) The total money outlay is also given.

(e) In the factor market, it is the perfect completion which prevails. Under the conditions assumed above, the producer is in equilibrium, when the following two conditions are fulfilled.

(1) The isoquant must be convert to the origin.

(2) The slope of the Isoquant must be equal to the slope of isocost line.

Diagram/Figure:

The least cost combination of factors is now explained with the help of figure.

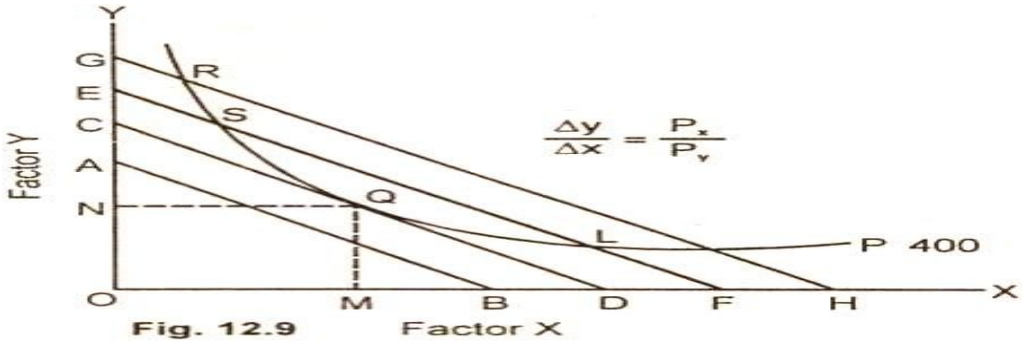


Fig. 12.9

Here the isocost line CD is tangent to the iso-product curve 400 units at point Q. The firm employs OC units of factor Y and OD units of factor X to produce 400 units of output. This is the optimum output which the firm can get from the cost outlay of Q. In this figure any point below Q on the price line AB is desirable as it shows lower cost, but it is not attainable for producing 400 units of output. As regards points RS above Q on isocost lines GH, EF, they show higher cost. These are beyond the reach of the producer with CD outlay. Hence point Q is the least cost point. It is the point which is the least cost factor combination for producing 400 units of output with OC units of factor Y and OD units of factor X. Point Q is the equilibrium of the producer. At this point, the slope of the isoquants equal to the slope of the isocost line. The MRT of the two inputs equals their price ratio.

Thus we find that at point Q, the two conditions of producer's, equilibrium in the choice of factor combinations, are satisfied.

(1) The isoquant (IP) is convex the origin.

(2) At point Q, the slope of the isoquant $\Delta Y / \Delta X$ ($MTYS_{xy}$) is equal to the slope of the isocost in Px / Py. The producer gets the optimum output at least cost factor combination.

Agriculture Marketing:

Concept of Agriulture Marketing:

Agricultural Marketing is "The sum total of all business activities that direct the flow of goods and services from the farm producers on to the consumers so as to get these at the time, place and in the form they want them and at the price they are prepared to pay for them". Agricultural Marketing includes the activities of transportation, processing, storage, standardization and grading, wholsaling and retailing. These marketing activities in the changing economy of Pakistan are inadequate. Generally agriculture market is a place where agriculture goods are brought and sold. But in economics, consists of all that area where the buyers and sellers are linked with each other in such as way that the price of goods is determined and exchangen could be made possible. This means that market determines the price on the basis of demand and supply.

Agriculture marketing includes all the processes, channels and services involved in moving a agricultural produce from the producer to ultimate consumer. And in this system comes some problems at different levels of production and selling. The following article will try to sum up them in brief;

Problems with Agricultural marketing system in Pakistan:

Are as follows:

1. **Collection of produce from large number of farmers:** In the last two decades, the agricultural output per hectare has considerably increased. Farming is no longer a way of life. It is now a profitable business. Since every farmer has now some produce to sell and they lie scattered, therefore the collection of produce from so many farms is an expensive matter. It is also a great handicap in the way of efficient marketing.
2. **Large number of intermediaries:** There are large number of intermediaries/ middlemen who are engaged in handling of farm produce from the growers on to the consumers. These intermediaries take quite a big share of the hard earned income of the farmers.

3. **Grading of agricultural commodities:** The commodities who are graded and standardized fetch higher prices in the market. In case the products of good and bad quality are mixed together, the reputation of the whole lot suffers and it is priced low in the market. In case of agricultural commodities in Pakistan, the mixing of good and bad products is very common. It, therefore, poses a problem marketing both inside and outside the country.
4. **Lack of storage facilities:** The storage facilities available to an average farmer are extremely primitive. Therefore, considerable losses occurs on the account of attack of insects pets. The marketing of damaged produce not only brings reduced prices but also is injurious in health.
5. **Inadequate facilities for transport and communication:** Due to inadequate facilities for transport, the cost of marketing the agricultural products is very high. They are also losses during transportation, handling of the products to the extend of 10%. Inadequate transport facilities is thus a great handicap in the way of efficient marketing.
6. **Weigh and measures:** Due to absence of regulated markets, the traders often use two types of weigh and measures, one for buying and other for selling. The overweights are used for buying the agricultural produce and underweights for selling. The farmers, therefore, suffers financial losses both at the time of buying and selling of the products.
7. **Inadequate credit facilities:** Though the credit facilities from Government are available to the farmers yet they are not adequate. The small farmers are forced to seek loans in time of need from the arthis or commission agents. They then sell their produce at low prices. If credit facilities are available to them to tide over the difficult period before harvest, they can then withhold their produce is, thus, an impediment in the way of efficient marketing.
8. **Market news:** Though the farmer now is quite knowledgeable of the farm products prices in the market through radio, television, yet more work is needed in disseminating market news to the farmers in special bulletins.

This step will save the farmers from exploitation by middlemen and will strengthen their bargaining capacity.

Brief Problems in agricultural marketing; Are as;

- 40% of agricultural produce is wasted in marketing.
- Damages during picking, harvesting and poor practices.
- No staying power
  - Low margins, seasonality and high perishability being the distinct features of this industry the access to seed capital and working capital is not easy.
  - No storage facilities
- Poor transport and communication facilities
- No grading, packing standards.
- Prevailing packaging system lacks requisite quality and shelf life.
- Lack of knowledge of quality parameters and standards.
- Multiplicity of laws and regulatory authorities affect the growth of industry.
- Very high difference in price between the farmers' realisation and consumer. even for the fresh produce. In processed food the high price of raw materials, excessive spoilage, inefficient and costly transportation, high cost of finance due to high taxes and duties leads to low demand of processed foods.
- Impediment in the flow of credit from financial institutions to the food processing industry due to the improper understanding of this sector to attain the required level of imparting skill.
- Pakistani brands of processed food are yet to be established in the international market.
- Competition with imported goods in the wake of liberalization of world trade.
- **LACK OF ORGANIZED MARKETING**
  - The marketing facilities for agricultural products in Pakistan are still far from satisfactory level.
  - Our cultivators can not get just prices for their produce due to defective marketing organization.

- Moreover the chain of middlemen between the producers and ultimate consumers take a heavy share of their produce. Thus the cultivators do not take much real interest in increasing their product too.
- Weak database and lack of market intelligence.
- Lack of participation by people, local bodies, NGOs, farmers' organization and industrial association.

Other Challenges/ Problems of Agricultural Marketing: There are several other challenges involved in marketing of agricultural produce. There is limited access to the market information, literacy level among the farmers is low, multiple channels of distribution that eats away the pockets of both farmers and consumers. The government funding of farmers is still at nascent stage and most of the small farmers still depend on the local moneylenders who are leeches and charge high rate of interest. There are too many vultures that eat away the benefits that the farmers are supposed to get. Although we say that technology have improved but it has not gone to the rural levels as it is confined to urban areas alone. There are several loopholes in the present legislation and there is no organized and regulated marketing system for marketing the agricultural produce. The farmers have to face so many hardships and have to overcome several hurdles to get fair and just price for their sweat.

GLOBALISATION: The globalization has brought drastic changes in India across all sectors and it is more so on agriculture, farmers and made a deep impact on agricultural marketing. It is basically because of majority of Indians are farmers. It has brought several challenges and threats like uncertainty, turbulence, competitiveness, apart from compelling them to adapt to changes arising out of technologies. If it is the dark cloud there is silver lining like having excellent export opportunities for our agricultural products to the outside world.

Possible Solutions to overcome agricultural marketing:

Are as follows;

1. **Establishment of new markets:** The old markets are getting congested. New markets may be built near the producing centres.
2. **Genuine representation**: The controlling authority should ensure genuine representation of growers interests on the market committees.
3. **Pakistan Agricultural Storage and Supply Corporation (PASSCO):** The Pakistan Agricultural Storage and Supply Corporation was established in 1973. It was set up to protect the interest of growers and consumers. The Government regulates the domestic market of agricultural commodities through this agency. It procures the less perishable commodities at the supply/ procurement prices in the producing years and releases the same in the market at the sale prices fixed by the Government. This market mechanism ensures the minimum prices announced by the Government to the growers at their door step. This agency is also responsible for construction and maintenance of grain warehouses. Godowns. Thus with the help of Government, the storage capacity of the less perishable goods is improved and expanded in the country. It also helps in stabilizing the prices of selected agricultural commodities.
4. **Coverage of Agricultural Marketing and Storage Limited (AMSL) to be expanded:** Agricultural Marketing and Storage Limited was set up in 1981 for catering the marketing problems of perishable agricultural commodities (fruits and vegetables, livestock products protatoes, onions) has done useful jobs in the stabilization of prices. There is a definite need to extend its scope and coverage.
5. **Market information:** There are various agencies, both at the Federal and Provincial levels (Federal Agricultural Marketing Department, Marketing Intelligence Services etc) which are entrusted with the grading of agricultural products, marketing research studies etc. There is need to strengthen and expand these organizations for an effective system of marketing and grading.
6. **Improvement of physical facilities:** There is an urgent need for improving proper physical marketing facilities, a net work of farm to market roads, adequate storage facilities, availability of processing facilities, marketing credit, and free flow of information on prices and qualities to the farmers. This will help the farmers who produce a marketable item to sell the produce at a convenient point and a reasonable price.
7. **Fruits and vegetable marketing projects:** The fruits and vegetable marketing project set up with the financial assistance of Asian Development Bank should be developed on sound footing. Similar projects should also be established at various fruit growing areas.
8. **More grading centres:** The grading centres are being set up at Karachi, Hederabad, Sukhar. More grading centres should be established in important cities of the country.

Other measure/ suggestions to improve agricultural marketing: Are as follows;

A. TRAINING

- Training and capacity building are key. Developing the marketing and entrepreneurial skills of farmers to enable them to adapt to changing markets.

B. ACCESS TO THE INPUTS

- Improving access to inputs in remote areas, and with resource-poor farmers, almost certainly requires innovative approaches to promote the development of commercial input supply networks, to avoid undermining such development with ill-conceived input subsidies, as well as group approaches and strengthening informal seed systems. Credit may have a role, but is not the pre-eminent factor it is often assumed to be.

C. AGRO-PROCESSING TECHNOLOGIES

- The key issues concerning marketing interventions based on the development or introduction of agro-processing technologies are that the technologies must be appropriate (in terms of cost, level of skill required and cultural factors, such as their acceptability to women), and there must be market demand for the end-product.

D. MARKETING INFORMATION

- Accurate and timely marketing information is needed by all stakeholders in the marketing chain (including input suppliers, producers, transporters, credit providers and traders).
- Broader 'marketing' information, as opposed to simple market price information, is most useful.

E. CREDIT PROGRAMMES

- There is considerable expertise in micro-credit – both good and bad.
- Other rural finance interventions with direct relevance to agricultural marketing include outgrower schemes (for input credit and marketing services) and inventory credit.
- The success of both depends on careful planning and research, and appropriate commercial linkages.

F. MARKETING LINKAGES

- Facilitating linkages between individuals or groups of farmers and private sector stakeholders is very important, yet often neglected.
- Building on existing private sector marketing channels is important
- Most importantly, it contributes significantly to the potential sustainability of marketing activities.

G. HOLISTIC APPROACH

- Isolated marketing interventions are unlikely to succeed. A holistic approach to marketing and enterprise development, looking at the whole range of marketing constraints and solutions, has been shown to be more successful in enabling farmers to participate in the market.

AGRICULTURAL MARKET REFORMS:

Below are the certain measures that can be affected to bring out the reforms in agricultural marketing so as to ensure just and fair price for the farming community.

• Provide loans to the farmer at low rate of interest so that they will be freed from the clutches of local moneylenders who squeeze them. It is said that farmer in born into debt, lives in debt and dies in debt. Right from the beginning of the life, the poor farmers approach money lenders for investing into cultivation who levies very high rate of interest and who takes away the maximum amount of the share from the produce. In case if the crop fails due to natural calamities then the situation would be worse as the farmer is not in a position to pay his loans. And ultimately he is forced to sell the land at throw away price to them on lender.

• It is essential to provide subsidized power supply and loans to the farmers as the expenses towards power consumption takes considerable amount of investments.
• Generate a new distribution network that connects the farmers directly to the consumers to get maximum returns as the present channel of distribution involves multiple mediatory who take away the major portion of profits which otherwise the farmers is supposed to get.
• Elimination of the existing loopholes in the present legislations is warranted.
• There should be stringent action against black marketers and hoarders who buy the stocks from farmers at cheap prices and create artificial demand and then sell the stocks at higher prices.
• Creating local outlets at each village where the farmers sell their stocks directly to the consumers or the authorized buyers at fixed prices would help to a great extent. Intervention of government in this network is essential to bring the fruits to the farmers.
• At the village level there should be counseling centers for farmers about the worth of their stocks so that they can get fair price. The crucial role of Non-Governmental Organizations (NGOs) is needed in this context.
• The existing legislations are outdated and are not in tune with the changing trends and technological inventions and the same need to be updated forthwith.
• The retail revolution has brought several changes in the retail sector where the retail giants buy in bulk directly from the suppliers and sell to the consumers directly and in this process they pass the benefits to the consumers as well. In the past the consumers were paying more for less as there were many channels of distribution system and now the consumers pay less for more.
• The government is already fulfilling the objective of providing reasonable prices for the basic food commodities through Public Distribution System with a network of 350,000 fair-price shops that are monitored by state governments. It is more effective in states like Punjab, Haryana and some parts of Uttar Pradesh. And the same needs to be strengthened across the country.
• Government should levy single entry tax in stead of levying multiple entry taxes either directly or indirectly for the transactions and activities that are involved in agricultural

marketing such as transportation, processing, grading etc., as it would benefit both farmers and consumers directly.

How to get fair and just prices for farmers.

Direct marketing of the agricultural produce is the need of the hour. Efforts may be made to provide facilities for lifting the entire stock that farmers are willing to sell with incentive price. There should be provision for storing the stocks such as godowns and warehouses. It helps the farmers to hold the stocks till the prices are stabilized. Usually immediately just after the harvest the prices would be low and if the farmers are patient in holding the same for some time it would fetch better prices. The brokers play the games during the trading of the agricultural stocks which the farmers do not know and realize because of improper information about the market prices. The brokers without any investment and with their negotiation skills transfer stocks by buying at low prices and selling at higher prices to the other end. The farmers need to be educated in this regard.

There should be all-round rationalization and standardization of the prices through legislative means. Presently there is vast gap between the marketing strategies of agricultural produce in India and abroad and the same needs to be bridge. Remove the various malpractices prevalent in the present system. There is need to set up marketing committees which has the representation of growers, merchants, local bodies, traders and nominees from the govt. There should be collective and integrative efforts and energies from all quarters for ensuring just and price for farmers.

CONCLUSION: There is no doubt that in any marketing there is a motive towards profit involved and at the same time the marketing is to be based on certain values, principles and philosophies such as offering just and fair prices to the farmers who toil hard to till. Bringing necessary reforms coupled with proper price discovery mechanism through regulated market system will help streamline and strengthen the agricultural marketing. In order to avoid isolation of small-scale farmers from the benefits of agricultural produce they need to be integrated and informed with the market knowledge like fluctuations, demand and supply concepts which are the core of economy. Marketing of

agriculture can be made effective if it is looked from the collective and integrative efforts from various quarters by addressing to farmers, middlemen, researchers and administrators. It is high time we brought out significant strategies in agricultural marketing with innovative and creative approaches to bring fruits of labor to the farmers.

Marketing Channels:

Meaning: Farmers producing agricultural produce are scattered in remote villages while consumers are in semi-urban and urban areas. This produce has to reach consumers for its final use and consumption. There are different agencies and functionaries through which this produce passes and reaches the consumer. A market channel or channel of distribution is therefore defined as a path traced in the direct or indirect transfer of title of a product as it moves from a producer to an ultimate consumer or industrial user. Thus, a channel of distribution of a product is the route taken by the ownership of goods as they move from the producer to the consumer or industrial user.

Factors affecting channels: There are several channels of distribution depending upon type of produce or commodity. Each commodity group has slightly different channel. The factors are :

1. Perishable nature of produce .e.g. fruits, vegetables, flowers, milk, meat, etc.
2. Bulk and weight–cotton, fodders are bulky but light in weight.
3. Storage facilities.
4. Weak or strong marketing agency.
5. Distance between producer and consumer. Whether local market or distant market.

Types of Market Channels:

Some of the typical marketing channels for different product groups are given below:

A. Channels of rice:

1. Producer–miller->consumer (village sale)
2. Producer–miller->retailer–consumer (local sale)
3. Producer–wholesaler->miller–retailer–consumer
4. Producer–miller–cum-wholesaler-retailer-consumer
5. Producer–village merchant–miller–retailer–consumer

6. Producer–govt. procurement–miller–retailer–consumer

B. Channel of other food grains:

1. Producer – consumer (village sale)
2. Producer–village merchant–consumer (local sale)
3. Producer–wholesaler-cum-commission agent retailer–consumer
4. Producer–primary wholesaler–secondary wholesaler– retailer– Consumer
5. Producer–Primary wholesaler–miller–consumer (Bakers).
6. Producer->govt. procurement–retailer–consumer.
7. Producer–government–miller–retailer–consumer.

C. Channels of cotton:

1. Producer–village merchant–wholesaler or ginning factory– wholesaler in lint–textile mill (consumer)
2. Producer–Primary wholesaler–ginning factory–secondary wholesaler–consumer (Textile mill)
3. Producer– Trader– ginning factory– wholesaler in lint– consumer (Textile mill)
4. Producer–govt. agency–ginning factory–consumer (Textile mill).
5. Producer–Trader–ginning factory–wholesaler–retailer– consumer (non-textile use).

D. Channels of Vegetables:

1. Producers–consumer (village sale)
2. Producer–retailer–consumer (local sale)
3. Producer–Trader–commission agent–retailer–consumer.
4. Producer–commission agent–retailer–consumer
5. Producer–primary wholesaler–secondary wholesaler– retailer– consumer (distant market).

E. Channels of Fruits:

1. Producer–consumer (village sale)
2. Producer–Trader–consumer (local sale)

3. Producer–pre-harvest contractor–retailer–consumer
4. Producer–commission agent–retailer–consumer.
5. Producer–pre-harvest contractor–commission agent– retailer–consumer
6. Producer–commission agent–secondary wholesaler– retailer–consumer (distant market).

These channels have great influence on marketing costs such as transport, commission charges, etc. and market margins received by the intermediaries such as trader, commission agent, wholesaler and retailer. Finally this decides the price to be paid by the consumer and share of it received by the farmer producer. That channel is considered as good or efficient which makes the produce available to the consumer at the cheapest price also ensures the highest share to the producer.

Functionaries of Agricultural Market: There are so many persons in agricultural markets who are involved in the sale and purchase of agriculture produce. They are; 1. Commission Agents. 2. Brokers (Dalals) 3. Weighmen (Tolas) 4. Labour (Palladar, Chugher, Rolas etc) 5. Other persons (Sweeper, water sprinkler and watchman).

1. **Commission Agents (Arthiyas):** They are the most prominent figures in our agricultural markets. They are classified into 1. Kacha Artiyas and 2. Packa Arthiya. The Kacha Arthiya performs the function of distribution or sale of agricultural produce. Sometimes, the Kacha Arthiya lends the farmers or villages shopkeepers that they would sell their produce to him. This can be observed in case of vegetables, fruits and crops of cotton and wheat etc. The elements of exploitation exists in case of such lending as they lower prices and charge heavy interest rate which is about 20 to 30%. The Packa Arthiya acts on the behalf of the buyers who is existing outside the agricultural area in the form of some firm etc. The Pacha Arthiya pays the price to Kacha Artiya on behalf of his client and then charges it from his buyer at the time of supply of goods. The Commission agents or Packa Artiyas also use their own funds. They give their funds to Packa Arthiya so that they could purchase the agriculture goods for them. The big

Commission Agents or firms also discount the bills of exchange. In this way, they become responsible for advancing loans to the farmers.

2. **Broker (Dalal):** The broker commonly known as Dalal becomes a source of link between the buyers and sellers of agriculture produce. Therefore, he manages to sell the product. In our markets, the broker is not a rich man, he possess a limited capital and he does not have a proper place or shop to sit. In certain cases, the broker works for both buyers and sellers. It is said that the brokers benefits the buyers who are from urban areas while he hardly cares for the interest of tillers who have weak position.
3. **Weighman (Tola):** He is the person who perform the function of weighing the agriculture produce. In whole sale markets he performs this function only while in retail market he performs other functions also.
4. **Other Labourers:** There are so many other labourers who work in agriculture markets. As, the Puladar unloads the produce; Chunghar assists in unloading and weighing; Rola places the produce in the weighing machine and Boreeta holds the mouths of bags at the time of pouring grains into bags.
5. **Other People:** These people comprise water-sprinkers, sweepers and watchman etc. Thus the prevailing agriculture channels in Pakistan is of such nature: The rural shopkeeper, trader or mahajan purchases the agriculture produce from the farmers. Then the Kacha Artiya purchases the same from these people. Then the Packa Artiya purchase the same these people. Then the Packa Artiya comes into the picture to purchase the agriculture produce. The Packa Artiya sells them to whole sellers, retailers or manufactures. Finally, these goods are sold over to consumers, domestic as well as foreigners etc.

Concept of Marketing Margin: The marketing margin is the difference between the price given by the last buyer and the price paid to the sellers. Such difference is determined by processing cost, stages of processing and perishability of goods. According to an estimate, there exists a 40 to 50% gap between the price paid by the final

consumer and price received by the farmer at farm gate. The same like situation exists in case of fruits and rice. However, the marketing margin was reduced in case of those crops which are sold in the urban markets. In case of vegetables and perishable goods such margin was higher while it was lower in case of food staples and cash crops. The crops where the marketing margin was higher results in exploitation of consumers and farmers while the traders and commissions agents are benefited.

The Food Marketing Margin (FMM):

Consumer food expenditure (or food bill) comprise of marketing components and farm components. Changes in these marketing and farm 'shares' of the food bill indicates the trends in costs, profits and services provided by farmers and food marketing firms as well as the performance of the farm sector compared to the food marketing sector. The proportion of the consumer expenditure that goes to the food marketing firms is referred to as Marketing Margin.

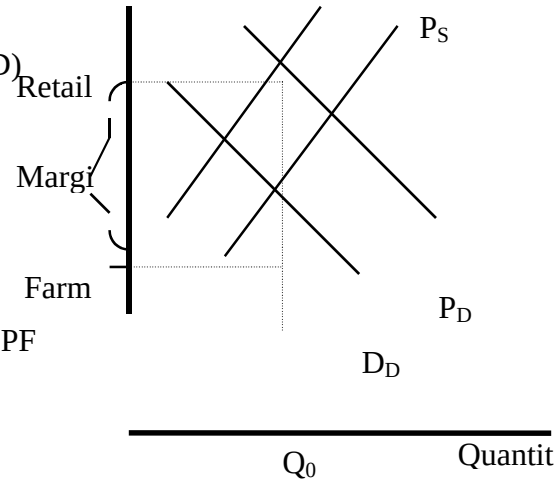
Theoretical Concept of Marketing Margins:

Marketing margin may be defined in 2 ways: (1) as the differences between consumer retail price and what farmers receive; (2) as the price of marketing services provided.

1. Price Difference Between Two Marketing Stages: The difference between what the consumer pays for food and what the farmer receives - i.e. a marketing margin is simply the difference between the primary and derived demand curves for a particular product. Primary demand is determined by the response of the ultimate consumers and this is usually based on the retail price and quantity purchased by consumers. Primary demand is in some sense a joint demand for all the inputs in the final product. Thus a food product at the retail (i.e. the primary demand) may be divided into two inputs: the farm-based components and the processing-marketing components. The derived demand for the farm product can be obtained by subtracting the cost of all marketing components from the primary demand (i.e. DD = PD - MC). It can therefore be seen that the farm level function or primary supply (PS) represents the derived demand for the farm component of the final product (DD). Thus the derived demand is based on price-quantity relations that exist either at the point where products leave the farm or at intermediate point, where they are purchased by wholesalers or processors.

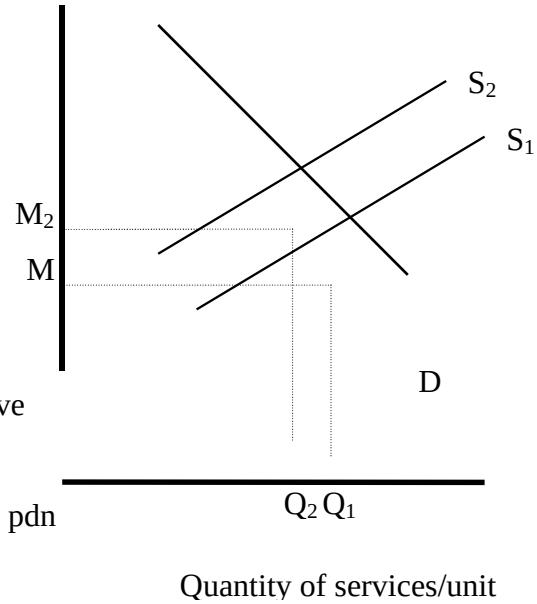
The primary supply (PS) represents the price-quantity relationship at the producer level. The derived supply (DS) at the retail level is derived from the primary supply (PS) by adding an appropriate margin. Thus, a retail price is established at the point where the primary demand (PD) intersects the derived supply (DS) as shown in the figure.

The farm-level price is based on derived demand (DD) and primary supply (PS). The difference in the two prices is the marketing margin or Absolute Marketing Margin: M= PR - PF



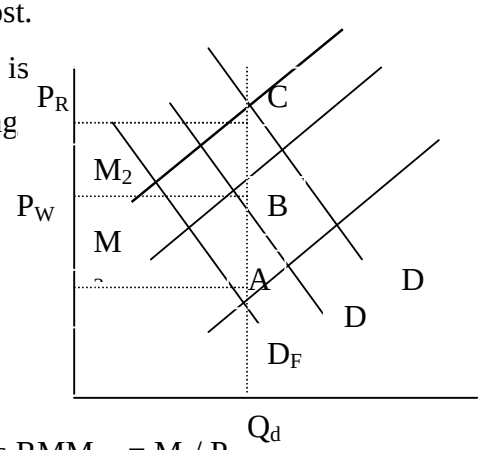
2. Differences in Prices Due to Cost of Services: The marketing margin may also be defined as the price or cost marketing services. Marketing costs are the return to factors in the marketing process: profits, wages, interest rents. The marketing services include items such as assembly, processing, transportation and retailing. These services are the time, place, form utilities provided by the marketing system. That is, the marketing margin is the price of all utility added by marketing firms, and this price includes marketing firm's **expense**s and **profits**. The supply relation for these marketing services is defined in terms of the marginal cost curve for the services, which in turn depends on input prices. However, marketing services also have demand relation. A marketing margin will thus depend on the particular demand and supply relations for the services, and in this regard, changes in margins may be the result of shits in the supply or demand relations for services as shown in the figure below.

The demand curve D is the market demand for services; the supply for services are S_1 and S_2. As a result of higher input prices, or service prices, marketing margins will increase from M_1 to M_2 and quantity of services purchase by consumers will decrease from Q_1 to Q_2. Pdn cost has fallen, while marketing costs have increased over the past1/4 century due to:



1. Pdn is more specialized in location - fall in pdn Cost but increases transport cost.
2. Away from home eating increases mkg cost.

Absolute Marketing Margin (AMM): This is the gap between prices at different marketing levels (farmers, wholesalers, retailers). Thus
$M_1 = P_R - P_F$ is AMM at farmer level
$M_2 = P_R - P_W$ is AMM at retail level
$M_3 = P_W - P_F$ is AMM at wholesale level



Relative Marketing Margin (RMM)
It is the ratio of AMM to price at which the product is bought. RMM = AMM/ P_B.
The relative margin from farmer to retailer is $RMM_{FR} = M_1 / P_R$.

Gross Marketing Margin
This is obtained by multiplying the AMM by the quantity marketed. GMM is represented by area $P_F AC P_R$ or GMM= $Q_d (P_R - P_F)$.

Net Marketing Margin (NMM)
Here the concept takes account of fixed cost, taxes and subsidies - i.e.
NMM = GMM - FC - T + S

World Trade Organizations:

History:

Pakistan is one of the founder Members of the WTO since 1995, and its predecessor organization the GATT set up in 1948. We are following an export led growth strategy and as such market access is of vital importance for our businesses. The increase in preferential arrangements and free trade areas between some members is also eroding our market access. Therefore in order to maintain current markets and gain new ones for our exportable goods and services we are dependent on the WTO to get tariff and non tariff barriers lowered on an MFN basis. Such MFN liberalization effectively levels the playing field for competitive suppliers. Pakistan has been actively engaged in the Doha round of trade talks that were launched in the Qatari capital in November 2001. Aptly named the "Doha Development Agenda" (DDA), this round of trade talks has been focusing on removing distortions in the world agriculture markets and attaining enhanced market access for both products and service providers from Pakistan.

Since 2001, there have two more ministerial conferences in Cancun in 2003 and Hong Kong in 2005 respectively. There have been many ups and downs in the road to a successful conclusion to the Doha round that takes into account the myriad interests of the developing membership. There was a breakdown of talks in the summer of 2006 which led many observers to be skeptical of the entire process. However, sustained efforts by the membership led to a partial resumption of the talks in November 2006 and full resumption since January 2007 after the annual meeting of the World economic forum at Davos.

Structure and functions of Trade Organization:

After the second world war, mainly the industrialized countries of the world started imposing trade barriers to protect their economies from recession. In order to decrease trade barriers and liberalize trade flows on equal footings, a conference was held in Geneva in 1947. It was agreed in writing among 23 participating nations of the world to extend trade recessions. The first step taken in this direction was the signing of General Agreement on Tariffs and Trade (GATT). GATT, is not a organization. It is set of

bilateral agreements among countries around the world to reduce tariffs and other barriers to trade among nations.

The main objectives of GATT were;

1. To treat all the member nations on equal footing.
2. Helping each other in raining the standard of living of the people.
3. Increasing volume of real income and effective demand for ensuring increased employment to the people.
4. Developing and making full use of the resources of the world.
5. Expansion of production and promotion of international trade by reducing tariffs and trade restrictions in a phased manner over a period of time.

The members of GATT increased to 132 countries in 1994 including Pakistan. Since its inception, several rounds of negotiations were held among members nations to reduce tariffs and non-tariffs barriers. The most important were the **Kennedy Round of Trade Negotiation** 1964-67, **Tokoyo Round** of 1973-79, **Uruguay Round** from 1986-94. GATT was transformed into World Trade Organization on Jan. 1, 1995.

Birth of World Trade Organization: World Trade Organization was established on January 1, 1995. Currently there are 150 member countries of WTO. The purpose of setting WTO was to replace GATT which was merely a legal agreement among member nations to liberalize and deregulate trade. WTO, on other hand has a wider scope than the old GATT. It has brought under it trade in services, intellectual property and investment. It follows all trade pacts which all members are committed under GATT. The WTO is a watch dog of international trade. It regularly examines the trade remines of individual members.

Objectives of WTO: The WTO is playing an important role in administering the new global trade rules in the following manners;

a. To help the member nations in solving the trading disputes through its Dispute settlement Court.

b. The 28 agreements included in the Urguay Round are to administer through various councils and committees of WTO.

c. As the WTO is a management consultant for world trade. Its economists are to keep a close watch on the pulse of the global trade.
d. To help in improving environment friendly trade.
e. To provide forum to member nations to settle trade disputes through negotiations.
f. To seek help from IMF and IBRD for greater cooperation in global trade policies.

Pakistan and WTO: Pakistan is a member of WTO since its inception in 1995. The opinion is divided over the issues of gains to be achieved from liberalization and deregulation of trade and the role of WTO. It is claimed particularly from the WTO that reduction in tariff and non-tariff barriers will give international trading a new dynasim and vitality. Further, it will provide increasing market access opportunities to the member nation. The volume of world trade would go up and there will be significant increase in world income from trade liberalization.

WTO and Agriculture Sector: In WTO an agreement regarding agriculture took place which is, in fact, the result of final act of Uruguay Round which was held in April, 1994 in Morocco. Uruguay Round gave importance to the agriculture sector for the first time and it was made a part of multi-lateral talks of GATT. Under this round, it was admitted there existed so many distortions in the agriculture sector. Therefore, the need is to create transparency and competition in world agriculture by removing distortions.

The distortions which exists in agriculture sector at the world level are due to local subsidies. It has been observed that the industrial countries have been giving subsidies to their agriculture sector since long. As a result, there have been bumper increases in agriculture outputs, which are being sold by the developed countries. The purpose behind all these measures to provide incentives to their farmers, raise their income and attain comparative advantage artificially in agriculture goods. Thus the basis agreement on agriculture which took place under WTO is aimed at creating a faireness in the World Trade of Agriculture. But they give to the farmers alongwith the subsidies which are given against agriculture exports by DCs. As a result, each will have the access in the

markets of other countries for selling out its agriculture products. All such means that the agreement on agriculture (AOA) has three main components as;

1. **Market Access:** In connection with market access to the world markets, the AOA has two important components as;

   a) Market access requires that all the members of WTO will use tariffs as a protective measures by removing the quantitative restrictions (ORs) like quota and export and import licences etc. Then the tariffs rates will be decreased. In this agreement, it has been settled that the DCs will reduce tariffs by 36% during the period of 6 years. While the developing countries will reduce tariff by 24% during the period of 10 years.

   b) Each member country will have to import a certain proportion of its domestic consumption of agriculture goods from the member country. The same situation of market access will have to be created which existed during 1986-88. If the imports of any country are nominal then the minimum access must be 3% for the DCs will the year 2000 and for the LDs till 2004. However, the importers will be able to impose in their country. They have been given the name of Special Safeguard Measures.

2. **Domestic Support:** Two objectives have been presented regarding domestic support in AOA as; (i). Identification of some acceptable measures with which farmers could be supported. (ii). Avoid such a support of farmers which could create distortions in the trade. These are concerned with DCs which excessively provide domestic support to their farmers. In order to know the amount of domestic support the Aggregate Member of Support (AMS) is used. With AMS, it is assessed that at average how much subsidies are bring provided for each category of agriculture good. In order to determine its AMS each country had many necessary estimations. If they are found 5% in case of DCs and 10% in case of UDCs, then they are not required to further cut their supports. In other cases, the DCs will bring a 20% reduction in their AMS in 6 years, while the UDCs will have to bring a 13.3% reduction in their AMS in 10 years. The AMS has two parts; one is concerned with subsidies attached

with goods, while the other is concerned with non-product subsidies. The subsidies concerned with product are linked with that total support which has been provided with each individual agriculture good. In this respect, the support price of that agriculture good will be kept in view. Whereas the non-products subsidies are linked with the total support which have been provided to whole agriculture sector i.e how much subsidies have been provided by Government on inputs like fertilizers, electricity, seeds, water and finance. All those support measures which have minimum effects on trade- known as Green Box Measures, need not decrease any further. These expenditures are faced by the Government in respect of research, pests controls, agriculture training, extension services and food security storages. Same is the case with those support measures which are concerned with Special and Differential treatments or S and D Box which are faced by the developing countries regarding agriculture investment or by providing subsidies to the poorest farmers.

3. **Export Subsidies:** Because of export subsidies the prices of so many products in the world markets become unstable. Thus under AOA, it has been decided that the member countries will reduce direct export subsidies by 36% with the period of 6 years. Again during this period, the quantities of export which are produced on the basis of subsidies will be reduced by 21%. While in case of developing countries such reduction will be 24% within the period of 10 years. However, the very poor countries will have to decrease such subsidies.

World Trade Organization and Pakistan's Agriculture: Pakistan is basically an agriculture country where agriculture sector contributes to 24% of the GDP, about 50% of the population is associated with agriculture as their profession; agriculture is not only a big profession for the people of the country, but it is also a way of life; it provides the necessary raw material in the form of cotton, sugarcane etc to run the textile and sugar industries, and

above almost of the exports where it is raw form, semi-finished and finished form are concerned with agriculture sector.

1. **Openness of Markets for foreign goods:** After the implementation of WTO, we will have to open our markets for foreign agriculture goods. Consequently, there exists the possibilities that cheaper sugar, cheaper cotton and even the cheaper wheat will easily enter our markets. In such situation, not only our textile and sugar industries will be out competed, but also our farmers especially the small farmers will also be discouraged when they have to face the rising cost of production after the withdrawal of subsidies on electricity, fuels, fertilizers and other inputs.
2. **Abolition of domestic support prices:** WTO, following the drive for globalization, wishes to promote free forces of demand and supply and free markets. Accordingly, it likes so abolish the state-run mechanism of support prices whereby the Government machinery purchases the surplus amount of food and agriculture goods at a minimum price announced by the government each year. But most of the farmers in Pakistan, due to financial reasons, are unable to store their commodities. As a result, they have to sell their produce at the earliest possible time. If the procurement price system is abolished, the increased production after harvesting will result in depressing down of their prices and the yield of the farmers. Moreover, like most of developing countries,, we are highly entrapped in market imperfections. Then, how the market mechanism will reward properly to the poor farmers and how they would be producing efficiently following free market mechanism.
3. **Withdrawal of export subsidies:** The large sectors like textile in Pakistan have started modernization to face the challenges of Post-WTO era. But this is not the case with the farming community, as its major part is illiterate and conservative. In Doha Declaration, it was agreed to phase out the subsidies on agriculture exports, given by DCs, but there was no commitment of any steep cut in these subsidies. Then there rises the issue that, why we should abolish domestic subsidies with US, EU and Japan

are not compromising on it. The US in fact has increased its agriculture subsidies recently. On the other hand, we have promised with ADB to abolish the subsidies for a loan of mere $ 350 million. Our exports of agriculture products particularly food items have not been upto the mark. Global trade in agriculture grew by 51% in the period 1986-98, but Pakistan's export increased by only 1%. We have a meager 0.38 to 0.6 percent share in global agriculture trade. Exports of India and Sri-Lanka have increased by 67% and 68% respectively in the same period. The withdrawal of subsidies on agriculture exports will further reduce the share of Pakistan in World's agriculture exports. Again we are facing the problems of efficiency. In this regard, we are lagging behind around 30-100%. The infrastructure and human resource development situations are poor and creating hurdles in the way to get ready for completion. We must use 10% of agriculture income, that is about 2.5% of GDP to get rid of agriculture problems.

Thus it is concluded that the rules of WTO will be implemented sooner or later and they cannot be avoided. Therefore, we will have to improve ourselves. The GOP should focus on building the infrastructure, the human resource development, quality enhancement and the research. The farmers should be educated, should be made more active and dynamic and crash progarmmes be initiated to remove all the defects of agriculture sector. Since we are having comparative advantage in agriculture goods as compared with industrial goods, therefore, we will have to stress more n increasing agriculture production and improving the quality of out food and agriculture products.

Sanitary and Phyto- Sanitary Measures (SPS):

The Agreement on the Application of Sanitary and Phytosanitary Measures (the "SPS Agreement") entered into force with the establishment of the World Trade Organization on 1 January 1995. It concerns the application of food safety and animal and plant health regulations. The Agreement on the Application of Sanitary and Phytosanitary Measures sets out the basic rules for food safety and animal and plant health standards. It allows countries to set their own standards. But it also says regulations must be based on science. They should be applied only to the extent necessary to protect human, animal or plant life or health. And they should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail. Member countries are encouraged to use international standards, guidelines and recommendations where they exist. However, members may use measures which result in higher standards if there is scientific justification. They can also set higher standards based on appropriate assessment of risks so long as the approach is consistent, not arbitrary. The agreement still allows countries to use different standards and different methods of inspecting products.

Key Features:

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.

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.

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.

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.

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.

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.

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.

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. 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.

Trade Related Intellectual Property Rights (TRIPs):

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) is an international agreement administered by the World Trade Organization (WTO) that sets down minimum standards for many forms of intellectual property (IP) regulation as applied to nationals of other WTO Members. It was negotiated at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1994. The TRIPS agreement introduced intellectual property law into the international trading system for

the first time and remains the most comprehensive international agreement on intellectual property to date. In 2001, developing countries, concerned that developed countries were insisting on an overly narrow reading of TRIPS, initiated a round of talks that resulted in the Doha Declaration. The Doha declaration is a WTO statement that clarifies the scope of TRIPS, stating for example that TRIPS can and should be interpreted in light of the goal "to promote access to medicines for all."

Specifically, TRIPS contains requirements that nations' laws must meet for copyright rights, including the rights of performers, producers of sound recordings and broadcasting organizations; geographical indications, including appellations of origin; industrial designs; integrated circuit layout-designs; patents; monopolies for the developers of new plant varieties; trademarks; trade dress; and undisclosed or confidential information. TRIPS also specifies enforcement procedures, remedies, and dispute resolution procedures. Protection and enforcement of all intellectual property rights shall meet the objectives to contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

TRIPS was negotiated at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1994. Its inclusion was the culmination of a program of intense lobbying by the United States, supported by the European Union, Japan and other developed nations. Campaigns of unilateral economic encouragement under the Generalized System of Preferences and coercion under Section 301 of the Trade Act played an important role in defeating competing policy positions that were favored by developing countries, most notably Korea and Brazil, but also including Thailand, India and Caribbean Basin states. In turn, the United States strategy of linking trade policy to intellectual property standards can be traced back to the entrepreneurship of senior management at Pfizer in the early 1980s, who mobilized corporations in the United States and made maximizing intellectual property privileges the number one priority of trade policy in the United States.

After the Uruguay round, the GATT became the basis for the establishment of the World Trade Organization. Because ratification of TRIPS is a compulsory requirement of World Trade Organization membership, any country seeking to obtain easy access to the numerous international markets opened by the World Trade Organization must enact the strict intellectual property laws mandated by TRIPS. For this reason, TRIPS is the most important multilateral instrument for the globalization of intellectual property laws. States like Russia and China that were very unlikely to join the Berne Convention have found the prospect of WTO membership a powerful enticement. Furthermore, unlike other agreements on intellectual property, TRIPS has a powerful enforcement mechanism. States can be disciplined through the WTO's dispute settlement mechanism.

The requirements of TRIPS:

TRIPS requires member states to provide strong protection for intellectual property rights. For example, under TRIPS:

- Copyright terms must extend to 50 years after the death of the author.
- Copyright must be granted automatically, and not based upon any "formality," such as registrations, as specified in the Berne Convention.
- Computer programs must be regarded as "literary works" under copyright law and receive the same terms of protection.
- National exceptions to copyright (such as "fair use" in the United States) are constrained by the Berne three-step test
- Patents must be granted for "inventions" in all "fields of technology" provided they meet all other patentability requirements (although exceptions for certain public interests are allowed and must be enforceable for at least 20 years.
- Exceptions to exclusive rights must be limited, provided that a normal exploitation of the work and normal exploitation of the patent is not in conflict.
- No unreasonable prejudice to the legitimate interests of the right holders of computer programs and patents is allowed.
- Legitimate interests of third parties have to be taken into account by patent rights.

- In each state, intellectual property laws may not offer any benefits to local citizens which are not available to citizens of other TRIPS signatories under the principle of national treatment. TRIPS also has a most favored nation clause.

Many of the TRIPS provisions on copyright were copied from the Berne Convention for the Protection of Literary and Artistic Works and many of its trademark and patent provisions were modeled on the Paris Convention for the Protection of Industrial Property.

Access to essential medicines:

The most visible conflict has been over AIDS drugs in Africa. Despite the role that patents have played in maintaining higher drug costs for public health programs across Africa, this controversy has not led to a revision of TRIPs. Instead, an interpretive statement, the Doha Declaration, was issued in November 2001, which indicated that TRIPs should not prevent states from dealing with public health crises. After Doha, PhRMA, the United States and to a lesser extent other developed nations began working to minimize the effect of the declaration.

A 2003 agreement loosened the domestic market requirement, and allows developing countries to export to other countries where there is a national health problem as long as drugs exported are not part of a commercial or industrial policy. Drugs exported under such a regime may be packaged or colored differently to prevent them from prejudicing markets in the developed world.

Implementation in developing countries:

The obligations under TRIPS apply equally to all member states, however developing countries were allowed extra time to implement the applicable changes to their national laws, in two tiers of transition according to their level of development. The transition period for developing countries expired in 2005. The transition period for least developed countries to implement TRIPS was extended to 2013, and until 1 January 2016 for pharmaceutical patents, with the possibility of further extension.

It has therefore been argued that the TRIPS standard of requiring all countries to create strict intellectual property systems will be detrimental to poorer countries' development. Many argue that it is, prima facie, in the strategic interest of most if not all underdeveloped nations to use any flexibility available in TRIPS to legislate the weakest IP laws possible. This has not happened in most cases. A 2005 report by the WHO found that many developing countries have not incorporated TRIPS flexibilities (compulsory licensing, parallel importation, limits on data protection, use of broad research and other exceptions to patentability, etc.) into their legislation to the extent authorized under Doha.

This is likely caused by the lack of legal and technical expertise needed to draft legislation that implements flexibilities, which has often led to developing countries directly copying developed country IP legislation or relying on technical assistance from the World Intellectual Property Organization (WIPO), which, according to critics such as Cory Doctorow, encourages them to implement stronger intellectual property monopolies. The requirements of TRIPS are, from a policy perspective, extremely stringent. Despite this, lobbyists for the industries that benefit from various intellectual property laws have continued since 1994 to campaign to strengthen existing forms of intellectual property and to create new kinds.

Trade Related Investment Measures (TRIMs):

The Agreement on Trade Related Investment Measures (TRIMs) are rules that apply to the domestic regulations a country applies to foreign investors, often as part of an industrial policy. The agreement was agreed upon by all members of the World Trade Organization. (The WTO wasn't established at that time, it was its predecessor, the GATT (General Agreement on Trade and Tariffs). The WTO came about in 1994-1995. Policies such as local content requirements and trade balancing rules that have traditionally been used to both promote the interests of domestic industries and combat restrictive business practices are now banned. Trade Related Investment Measures is the name of one of the four principal legal agreements of the WTO trade treaty. TRIMs are rules that restrict preference of domestic firms and thereby enable international firms to operate more easily within foreign markets.

Overview of Rules:

(1) Trade-Related Investment Measures:

In the late 1980s, there was a significant increase in foreign direct investment throughout the world. However, some of the countries receiving foreign investment imposed numerous restrictions on that investment designed to protect and foster domestic industries, and to prevent the outflow of foreign exchange reserves. Examples of these restrictions include local content requirements (which require that locally-produced goods be purchased or used), manufacturing requirements (which require the domestic manufacturing of certain components), trade balancing requirements, domestic sales requirements, technology transfer requirements, export performance requirements (which require the export of a specified percentage of production volume), local equity restrictions, foreign exchange restrictions, remittance restrictions, licensing requirements, and employment restrictions. These measures can also be used in connection with fiscal incentives as opposed to requirement. Some of these investment measures distort trade in violation of GATT Article III and XI, and are therefore prohibited. Until the completion of the Uruguay Round negotiations, which produced a well-rounded Agreement on Trade-Related Investment Measures (hereinafter the "TRIMs Agreement"), the few international agreements providing disciplines for measures restricting foreign investment provided only limited guidance in terms of content and country coverage. The OECD Code on Liberalization of Capital Movements, for example, requires members to liberalize restrictions on direct investment in a broad range of areas. The OECD Code's efficacy, however, is limited by the numerous reservations made by each of the members. In addition, there are other international treaties, bilateral and multilateral, under which signatories extend most-favoured-nation treatment to direct investment. Only a few such treaties, however, provide national treatment for direct investment. Moreover, although the APEC Investment Principles adopted in November 1994 provide rules for investment as a whole, including non-discrimination and national treatment, they have no binding force.

(2) Legal Framework

GATT 1947 prohibited investment measures that violated the principles of national treatment and the general elimination of quantitative restrictions, but the extent of the prohibitions was never clear. The TRIMs Agreement, however, contains statements prohibiting any TRIMs that are inconsistent with the provisions of Articles III or XI of GATT 1994. In addition, it provides an illustrative list that explicitly prohibits local content requirements, trade balancing requirements, foreign exchange restrictions and export restrictions (domestic sales requirements) that would violate Article III:4 or XI:1 of GATT 1994. TRIMs prohibited by the Agreement include those that are mandatory or enforceable under domestic law or administrative rulings, or those with which compliance is necessary to obtain an advantage (such as subsidies or tax breaks). Figure 8-1 contains a list of measures specifically prohibited by the TRIMs Agreement. Note that this figure is not exhaustive, but simply illustrates TRIMs that are prohibited by the TRIMs Agreement. The figure, therefore, calls particular attention to several common types of TRIMs. We would add that this figure identifies measures that were also inconsistent with Article III:4 and XI:1 of GATT 1947. Indeed, the TRIMs Agreement is not intended to impose new obligations, but to clarify the pre-existing GATT 1947 obligations. Under the WTO TRIMs Agreement, countries are required to rectify any measures inconsistent with the Agreement, within a set period of time, with a few exceptions.

Glossary:

Acreage Reduction Program (ARP): An annual voluntary land retirement system in which participating farmers idled a prescribed portion of their crop acreage base of wheat, feed grains, cotton, or rice. Farmers were required to participate in the ARP to be eligible for benefits such as Commodity Credit Corporation (CCC) loans and deficiency payments. The 1996 Act repealed or did not reauthorize ARPs.

Aggregate Measure of Support (AMS): An index that measures the monetary value of the extent of government support to a sector. The AMS, as defined in the Agreement on Agriculture, included both budgetary outlays as well as revenue transfers from consumers to producers as a result of policies that distort market prices. The AMS includes actual or calculated amounts of direct payments to producers (such as deficiency payments), input subsidies (on irrigation water, for example), the estimated value of revenue transferred from consumers to producers as a result of policies that distort market prices (market price supports), and interest subsidies on commodity loan programs. The AMS differs from the broader agricultural support measure, the Producer Subsidy Equivalent, by excluding estimated benefits (or costs) of certain non-commodity specific policies (e.g., research and environmental programs), and by using special WTO-defined measures of deficiency payments and market price supports. Furthermore, the final AMS for the WTO implementation period (1995-2000) is adjusted to exclude deficiency payments under WTO special provisions, even though they are included in the WTO base period.

Agricultural Market Transition Act (AMTA): Title I of the 1996 Act allowed farmers who participated in the wheat, feed grain, cotton, and rice programs in any one of the previous 5 years to enter into 7-year production flexibility contracts for 1996-2002. Total production flexibility contract payment levels for each fiscal year were fixed. The AMTA allowed farmers to plant 100 percent of their total contract acreage to any crop, except for limitations on fruits and vegetables, and receive a full payment. Land had to be maintained in agricultural uses, including idling or conserving uses. Unlimited haying and grazing was allowed, as is the planting and harvesting of alfalfa and other forage crops - with no reduction in payments.

Amber Box Policy: An expression that developed during the GATT trade negotiations using a traffic light analogy to rank policies. The traffic light analogy was that an amber policy be subject to careful review and reduction over time. Amber box policies include policies such as market price supports and input subsidies.

Base Acreage (or Crop Acreage Base): A farm's crop-specific acreage of wheat, feed grains, upland cotton, rice, oilseeds, or peanuts eligible to participate in commodity programs under the 2002 Farm Act. Base acreage includes land that would have been eligible to receive production flexibility contract (PFC) payments in 2002 and producers of other covered commodities (oilseed and peanut producers). Producers had the option to choose base acres to reflect contract acreage that would otherwise have been used for planting for the commodity during the 1998 to 2001 crop years. Producers must select one of the two options for all covered commodities, including oilseeds.

Blue Box Policies: A popular expression to represent the set of provisions that exempts from reduction commitments those program payments that limit production, such as diversion payments on set-aside land.

Class I: Classification used in Federal Milk Marketing Orders for Grade A milk used in all beverage milks.

Commodity Credit Corporation (CCC): A federally owned and operated corporation within the U.S. Department of Agriculture created to stabilize and support agricultural prices and farm income by making loans and payments to producers, purchasing commodities, and by various other operations. The CCC handles all money transactions for agricultural price and income support and related programs.

Commodity Loan Rate: The price per unit (pound, bushel, or hundredweight) at which the Commodity Credit Corporation provides commodity-secured loans to farmers for a specified period of time.

Conservation Compliance Provision: A provision originally authorized by the Food Security Act of 1985 that requires farmers who operate highly erodible land to manage

this land under an approved conservation system in order to maintain eligibility in various specified Federal farm programs. The 1996 and 2002 Acts retain these provisions.

Conservation Reserve Program (CRP): Established in its current form in 1985 and administered by USDA's Farm Services Agency (FSA), this is the latest version of long-term land retirement programs used in the 1930s and 1960s. CRP provides farm owners or operators with an annual per-acre rental payment and half the cost of establishing a permanent land cover, in exchange for retiring environmentally sensitive cropland from production for 10- to 15- years. In 1996, Congress reauthorized CRP for an additional round of contracts, limiting enrollment to 36.4 million acres at any time. The 2002 Farm Act increased the enrollment limit to 39 million acres. Producers can offer land for competitive bidding based on an Environmental Benefits Index (EBI) during periodic signups, or can automatically enroll more limited acreage in practices such as riparian buffers, field windbreaks, and grass strips on a continuous basis. CRP is funded through the Commodity Credit Corporation (CCC).

Conservation Reserve Program Continuous Sign-Up: This program was initiated following the 1996 farm bill. Continuous sign-up allows enrollment of land in riparian buffers, filter strips, grass waterways and other high priority practices without competition. Eligible land is automatically accepted into the program. A total of 4 million acres (under the CRP acreage cap) are reserved for continuous sign-up enrollment.

Conservation Reserve Enhancement Program (CREP): This program was initiated following the 1996 farm bill. CREP is a State-federal conservation partnership program targeted to address specific State and nationally significant water quality, soil erosion, and wildlife habitat issues related to agriculture. The program offers additional financial incentives beyond the CRP to encourage farmers and ranchers to enroll in 10-15 year contracts to retire land from production. CREP is funded through CCC.

Conservation Security Program (CSP): This newly created program will provide payments to producers for maintaining or adopting structural and/or land management

practices that address a wide range of local and/or national resource concerns. As with EQIP, a wide range of practices can be subsidized. But CSP will focus on land-based practices and specifically excludes livestock waste handling facilities. Producers can participate at one of three tiers; higher tiers require greater conservation effort and offer higher payments. The lowest cost practices that meet conservation standards must be used.

Contract Acreage: Land voluntarily enrolled in a production flexibility contract (PFC) under the 1996 Act. Land was eligible for the PFC enrollment if it had attributed to it at least one crop acreage base for a contract crop that would have been in effect for 1996 under previous farm law, prior to its suspension by the 1996 Act. A farmer could voluntarily choose to reduce contract acreage in subsequent years. Upon leaving the Conservation Reserve Program, base acreage under previous farm law could be entered into a production flexibility contract. Otherwise, the maximum amount of contract acreage was established during the one-time sign up for the PFC in 1996.

Contract Crops: Crops eligible for production flexibility contract payments under Title I of the 1996 Act: wheat, corn, sorghum, barley, oats, rice, and upland cotton.

Counter-Cyclical Payment: A payment that adjusts automatically, increasing when prices are low and decreasing when prices are high.

Covered Commodities: Term used in the 2002 Act referring to wheat, corn, barley, oats, upland cotton, rice, soybeans, and other oilseeds (sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, or if designated by the Secretary, another oilseed).

Dairy Export Incentive Program: A program that offers subsidies to exporters of U.S. dairy products based on the volume of exports. The intent is to make the U.S. products more competitive in world markets, thereby increasing U.S. exports. The Commodity Credit Corporation receives export-price bids from exporters and makes the payments either in cash or through certificates redeemable for commodities. The program was originally authorized by the 1985 Act, and reauthorized by subsequent Acts. The 2002 Act extends the program through 2007.

Decoupled Payments: Government program payments to farmers that are not linked to the current levels of production, prices, or resource use. When payments are decoupled, farmers make production decisions based on expected market returns rather than expected government payments.

De minimis Rule: The total aggregate measurement of support (AMS) includes a specific commodity support only if equals more than 5 percent of its value of production for developed countries like the U.S. The noncommodity-specific support component of the AMS is included in the AMS total only if it exceeds 5 percent of the value of total agricultural output. The de minimis exemption for developing countries is 10 percent.

Direct Payments: See Decoupled payments.

Environmental Quality Incentives Program (EQIP): EQIP was established by the 1996 Farm Act as a new program to consolidate and better target the functions of the ACP, WQIP, GPCP, and Colorado River Basin Salinity Program. The objective of EQIP, like its predecessor programs, is to encourage farmers and ranchers to adopt practices that reduce environmental and resource problems through 5- to 10- year contracts providing education, technical assistance, and financial assistance, targeted to watersheds, regions, or areas of special environmental sensitivity identified as priority areas. The 1996 Farm Act called for half of EQIP funds to be devoted to conservation practices related to livestock production, and to maximize environmental benefits per dollar expended. EQIP is designed to consider all sources of conservation funding from CRP, WRP, other Federal programs, State or local program, and nongovernmental partners. Proposed projects with greater funding from these sources receive more favorable scoring for EQIP funding. EQIP is run by NRCS and funded through CCC. The 2002 Farm Act extended EQIP through 2007 and increased the percentage of funds devoted to livestock production to 60 percent.

Export Enhancement Program (EEP): Started in May 1985 under the Commodity Credit Corporation Charter Act to help U.S. exporters meet competitors' prices in subsidized markets. Under the EEP, exporters receive subsidies based on volume of

exports to specifically targeted countries. The program has been reauthorized by the 1985 and subsequent Acts. The 2002 Act extends the program through 2007.

Export Subsidies: Special incentives, such as cash payments, extended by governments to encourage increased foreign sales; often used when a nation's domestic price for a good is artificially raised above world market prices.

Farmland Protection Program (FPP): Established in the 1996 Farm Act, FPP provides funding to State, local, or tribal entities with existing farmland protection programs to purchase conservation easements or other interests in order to keep agricultural land in farming. The goal of the program, run by NRCS, is to protect between 170,000 and 340,000 acres of farmland. Priority is given to applications for perpetual easements, although a minimum of 30 years is required.

Farm Security and Rural Investment Act of 2002 (2002 Act): The omnibus food and agricultural legislation (Farm Act) signed into law on May 13, 2002, that provides a 6-year framework (2002-2007) for the Secretary of Agriculture to administer various agricultural programs.

Farm Service Agency (FSA): A U.S. Department of Agriculture agency that administers commodity price and income support, farm loans, and resource conservation programs through a network of State and county offices.

Federal Agriculture Improvement and Reform Act of 1996 (1996 Act) (P.L. 104-127): The omnibus food and agriculture legislation (Farm Act) signed into law on April 4, 1996, that provided a 7-year framework (1996-2002) for the Secretary of Agriculture to administer various agricultural and food programs. The 1996 Act redesigned income support and supply management programs for producers of wheat, corn, grain, sorghum, barley, oats, rice, and upland cotton. Production flexibility contract payments were made available under Title I of the 1996 Farm Act (see the Agricultural Market Transition Act). Acreage reduction programs were suspended. Federal milk marketing orders were revised and consolidated under the Act. Program changes were also made for sugar and peanuts.

Trade programs were more targeted and environmental programs were consolidated and extended in the 1996 Act.

Federal Milk Marketing Orders: Regulations issued by the Secretary of Agriculture specifying minimum prices that processors must pay for milk and conditions under which milk can be bought and sold within a specified area. The orders classify and fix minimum prices according to the products for which milk is used. The 1996 Act required consolidation of the Federal milk marketing orders into 10-14 regional orders, down from 33.

General Agreement on Tariffs and Trade (GATT): An international agreement originally negotiated in 1947 to increase international trade by reducing tariffs and other trade barriers. The agreement provides a code of conduct for international commerce and a framework for periodic multilateral negotiations on trade liberalization and expansion. The Uruguay Round Trade Agreement modified the code and the framework and established the World Trade Organization (WTO) on January 1, 1995 to replace the institutions created by the GATT.

Grassland Reserve Programs (GRP): This newly established program will assist new owners, through long-term contracts or easements, in restoring grassland and conserving virgin grassland. Up to 2 million acres of restored, improved, or natural grassland, rangeland, and pasture, including prairie can be enrolled. Tracts must be at least 40 contiguous acres, subject to waivers. Eligible grassland can be enrolled under 10- to 30-year contracts or under 30-year or permanent easements.

Green Box Policies: An expression that developed during the GATT trade negotiations using the traffic light analogy to rank policies. The Green Box describes domestic support policies that are not subject to reduction commitments under the Uruguay Round Agreement on Agriculture. These policies are assumed to affect trade minimally, and include support such as research, extension, food security stocks, disaster payments, and structural adjustment programs.

Highly Erodible Land (HEL): Soils with an erodibility index (EI) equal to or greater than 8 are defined as HEL. An EI of 8 indicates that without any cover or conversation practices, the soil will erode at rate 8 times the soil at tolerance level. Fields containing at least one-third or 50 acres (whichever is less) of HEL are designated as highly erodible for the purpose of Highly-Erodible Land Conservation Provisions.

Incentive Payments: Payments to producers in an amount or at a rate necessary to encourage producers to adopt one or more land management practices.

Interstate Compact: A formal agreement between or among States, enacted through State and Federal legislation, which allows the combined States to exert authority not granted to them by law. The 1996 Act initiated an Northeast Interstate Dairy Compact which was not continued in the 2002 Act.

Loan Deficiency Payments: A provision initiated in the Food Security Act of 1985 giving the Secretary the discretion to provide direct payments to wheat, feed grain, upland cotton, rice, or oilseed producers who agree not to obtain a commodity loan on their production for a particular crop year. Loan deficiency payments (LDP) continue to be available for all loan commodities except ELS cotton. The LDP provision is applicable only if a marketing loan provision has been implemented; in which case a commodity loan may be repaid at a price less than then original loan rate (the repayment rate). The intent of these two provisions is to minimize the accumulation of stocks by the government, minimize the costs of government storage, and to allow U.S. commodities to be marked freely and competitively. The LDP payment amount is determined by multiplying the local marketing loan payment rate by the amount of the commodity eligible for a loan. The marketing loan payment rate at this point in time is the announced local commodity loan rate minus the then current local repayment rate for marketing loans.

Market Access: The extent to which a country permits imports. A variety of tariff and nontariff trade barriers can be used to limit the entry of foreign products.

Market Loss Assistance Payments: Payments authorized by emergency legislation in 1998-2001. Payments were made to recipients of production flexibility contract payments. Similar payments were also authorized for oilseed and dairy producers for selected years .

Market Access Program (MAP): Formerly the Market Promotion Program, designed to encourage development, maintenance, and expansion of commercial commodity exports to specific markets. Participating organizations include nonprofit trade associations, state regional trade groups, and private companies. The 2002 Act increased the annual authority for the program to $200 million annually by fiscal 2007.

Marketing Loan Program: Provisions first authorized by the Food Security Act of 1985 (P.L. 99-198) that allow producers to repay nonrecourse commodity loans at less than the announced loan rate whenever the world price or loan payment rate for the commodity loans at less than the loan rate. Prior to 1985, commodity loans had to be repaid at the original loan rate, which often resulted in the accumulation of surplus commodities in Government inventories. Marketing loan provisions are aimed at reducing government costs of stock accumulation. Marketing loans provisions were originally mandated only for rice and upland cotton. The Security of Agriculture had the option of implementing marketing loans for wheat, feed grains, soybeans, and honey under the 1985 Act and the subsequent farm acts. The 1996 Act mandates that marketing loan provisions be implemented for feed grains, wheat, rice, upland cotton, and all oilseeds. The 2002 Act established marketing loan provisions for peanuts, chickpeas, lentils, dry beans, wool, mohair, and honey.

Marketing Orders: Federal marketing orders authorize agricultural producers in a designated region to take various actions to promote orderly marketing by influencing such factors as supply and quality, and pooling funds for promotion and research. Marketing orders are initiated by the industry, but must be approved by the Security of Agriculture and by a vote among affected producers. Once approved, a marketing order is mandatory for all producers in the marketing order area. There are marketing orders for a number of fruits, nuts, vegetables, and for milk.

Marketing Year: The 12-month period starting with the month when the harvest of as specific crop typically begins.

- Wheat, barley, oats, canola, rapeseed, flaxseed, and crambe - June 1st of year crop is harvested through the next May
- Corn, sorghum, soybeans, sunflower seed, safflower, and mustard seed - September 1st of year crop is harvested through the next August
- Upland cotton, rice and peanuts - August 1st of year crop is harvested through the next July

Noninsured Assistance Program (NAP): A USDA program that provides yield risk protection to producers of crops that are not currently insurable under the Federal crop insurance program. Producers do not pay a premium for NAP, although loss triggers must be met at both the area and individual-farm level in order for producers to receive a payment. The area trigger requires a farm-level loss of at least 50 percent. Producers must file acreage reports for each crop prior to the acreage reporting date.

Natural Resources Conservation Service (NRCS): A U.S. Department of Agriculture agency created in 1994 by merging the Soil Conservation Service and the Agricultural Stabilization and Conservation Service's conservation cost-sharing programs. The NRCS is responsible for developing and carrying out national soil and water conservation programs in cooperation with landowners, farm operators, and others.

Nonrecourse Loan Program: Provides commodity-secured loans to producers for a specified period of time (typically 9 months), after which the producer may either repay the loan and accrued interest or transfer ownership of the commodity pledged as collateral to the Commodity Credit Corporation (CCC) as full settlement of the loan, without penalty. These loans are available on a crop year basis for wheat, feed grains, cotton, peanuts, tobacco, rice, and oilseeds. Sugar processors are also eligible for nonrecourse loans. Participants in commodity loan programs agree to store and maintain a certain quantity of a commodity as loan collateral, for which they receive loan funds from the CCC based on the announced commodity-specific, per-unit loan rate. The loans

are called nonrecourse because, at the producer's option, the CCC has no recourse but to accept the commodity as full settlement of the loan. For those commodities eligible for marketing loan benefits, producers may repay the loan at the world price (rice and upland cotton) or posted county price (wheat, feed grains, and oilseeds).

Other Oilseeds: Sunflower seed, canola, rapeseed, safflower, mustard seed, and flaxseed.

Oilseeds: Soybeans**,** sunflower seed, canola, rapeseed, safflower, mustard seed, and flaxseed.

Payment Limitation: The maximum amount of commodity program benefits a person can receive by law. "Persons," as defined by payment limitation regulations established by the Secretary of Agriculture, are individuals; members of joint operations; or entities such as limited partnerships, corporations, associations, trusts, and estates that are actively engaged in farming. The 1996 Act set payment limits at $40,000 per person per fiscal year for payments on production flexibility contracts. The Food Security Act of 1985, as amended by the 1996 Act, established limits at $75, 000 per person per crop year for the total amount received from marketing loan gains and loan deficiency payments for one or more crops of contract commodities or oilseeds, during 1996-2002. However, the agricultural budget appropriations acts for fiscal years 2000 and 2001 established a $150,000 payment limitation for the total of marketing loan gains and loan deficiency payments for the 1999 and 2000 crops of contract commodities and oilseeds (and honey for 2000 crop). The 2002 Act maintains the $40,000 on direct payments and the $75,000 limit on marketing loan gains and loan deficiency payments. Counter-cyclical payments have a $65,000 limit under the 2002 Act.

Permanent Legislation: Legislation that would be in effect in the absence of all temporary amendments (farm acts). These laws include provisions of the Agricultural Adjustment Act of 1938, and the Commodity Credit Corporation Charter Act of 1948, and the Agricultural Act of 1949. They serve as the basis laws authorizing the major

commodity programs. Generally, each new farm act amends the permanent legislation for a specified period.

Production Flexibility Contract (AMTA) Payments: Payments to farmers during the 1996-2002 who enrolled "contract acreage", under Title I, Subtitle B of the 1996 act. The annual total amount was first determined for all contract crops combined (wheat, rice, feed grains, and upland cotton), and this total was then allocated to specific crops based on percentage allocation factors established in the 1996 farm act. Each participating producer of a contract crop received payments equal to the product of their production flexibility contract payment quantity and the national average production flexibility contract payment rate.

Production Flexibility Contract Payment Rate: The amount paid to farmers per unit of participating production under the 1996 Act. A farm's contract acreage and farm program payment yield was established in 1996 during the sign-up period. A national average payment rate per unit for each crop was calculated each year based on the then total participating production (production flexibility contract quantity) and the total amount to be paid out for each crop, largely predetermined by the 1996 Act.

Production Flexibility Contract Payment Quantity: The quantity of production eligible for production flexibility contract payments under the 1996 Act. Payment quantity is calculated as the farm's program yield (per acre) multiplied by 85 percent of the farm's contract acreage.

Program Crops: Prior to the 2002 Act they were crops for which federal support programs are available to producers, including wheat, corn, barley, grain sorghum, oats, extra long staple and upland cotton, rice, oilseeds, tobacco, peanuts, and sugar. The 2002 Act uses the term covered commodities and loan commodities in place of program crops.

Program Payment Yield: The farm commodity yield of record (per acre), determined by a procedure outlined in legislation. Pervious law allowed USDA to make individual farm program yields equal to the average of the preceding 5 years' harvested yield (dropping the highest and lowest yield years). This provision had not been implemented in recent

years. Prior to the 2002 Act, program yields continued to be frozen at 1985 levels. The 2002 Act gives producers the choice (if they have chosen to update base acres) to update program payment yields.

Recourse Loan Program: A provision allowing farmers or processors participating in government commodity programs to pledge a quantity of a commodity as collateral and obtain a loan from the Commodity Credit Corporation (CCC), subject to the condition that the borrower must repay the loan with interest within a specified period. This is unlike the condition with nonrecourse loans whereby producers may settle their loans by giving the collateral to the CCC.

Safety Net: A policy that ensures a minimum income, consumption, or wage level for everyone in a society or subgroup. It may also provide people (businesses) with protection against risks, such as lost income, limited access to credit, or devastation from natural disaster.

Target prices: Support levels established by law prior to 1996 for wheat, corn, grain sorghum, barley, oats, rice, and upland cotton. Prior to 1996, farmers participating in annual Federal commodity programs received deficiency payments based on the national average market price during a specified time period, or the national average loan rate established for the crop year. Target prices were not re-authorized by the 1996 Act. The 2002 Act re-authorized target prices for covered commodities to be used in calculating counter-cyclical payments.

Uruguay Round: The multilateral trade negotiations under the auspices of the General Agreement on Tariffs and Trade (GATT) during 1986-94, leading up to the Uruguay Round Agreement on Agriculture, among other provisions. The Agreement on Agriculture covers four areas: export subsidies, market (or import) access, internal (or domestic) supports, and sanitary and phytosanitary rules. The agreement was implemented over a 6-year period, 1995-2000.

Wetlands Conservation (Swampbuster): First established in 1985, the so-called "Swampbuster" provision states that farmers or ranchers lose eligibility for farm program

benefits if they produce an agricultural commodity on a wetland converted after December 23, 1985, or if they convert a wetland after November 28, 1990, and make agricultural production possible on the land. NRCS certifies technical compliance and FSA administers changes in farm program benefits.

Wetlands Reserve Program (WRP): Congress authorized WRP under the 1985 Farm Act. NRCS administers the program in consultation with FSA and other Federal agencies. WRP is funded through CCC. Landowners who choose to participate in WRP may sell a permanent or 30-year conservation easement or enter into a 10-year cost-share restoration agreement to restore and protect wetlands. The landowner voluntarily limits future use of the land, yet retains private ownership. USDA pays 100 percent of restoration costs for permanent easements, and 75 percent for 30-year easements and restoration cost-share agreements. The 2002 Act increased the acreage cap to 2.275 million acres.

Wildlife Habitat Incentives Program (WHIP): The 1996 Farm Act created WHIP to provide cost-sharing assistance to landowners for developing habitat for upland wildlife, wetland wildlife, threatened and endangered species, fish, and other types of wildlife. Participating landowners, with the assistance of the NRCS district office, develop plans for installing wildlife habitat development practices, and requirements for maintaining the habitat for the 5-to-10 year life of the agreement. Cost-share payments of up to 75 percent may be used to established and maintain practices. Cooperating State wildlife agencies and nonprofit or private organizations may provide expertise or additional funding to help complete a project. WHIP funds are distributed to States based on State wildlife habitat priorities, which may include wildlife habitat areas, targeted species and their habitats and specific practices.

World Trade Organization (WTO): An international organization established by the Uruguay Round trade agreement to replace the institution created by the General Agreement on Tarriffs and Trade known as the GATT. The WTO provides a code of conduct for international commerce and a framework for periodic multilateral negotiations on trade liberalization and expansion. The Uruguay Round trade agreement

modified the code and the framework and established the World Trade Organization (WTO) on January 1, 1995.