COURSE GUIDE

CRD 426
DEVELOPMENT PLANNING

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INTRODUCTION

This course guide explains in brief what DEVELOPMENT PLANNING is all about. It is a semester, 3-credit, B.Sc Cooperative and Rural Development course. The course is made up of thirty units and the units are collapsed in five modules.

The overall aim of DEVELOPMENT PLANNING is to enable you understand the strategic measurable goals that a person, organization or community plans to meet within a certain amount of time.

Usually the development plan includes time-based benchmarks. It generally also includes the criteria that will be used to evaluate whether or not the goals were actually met.

COURSE AIMS

To achieve the stated aims, the course sets specific objectives at the beginning of each unit which you should read before studying the unit. You should endeavour to look at the objectives after completing each unit to ensure that they meet the requirements.

To complete the course, you are required to study the units, read the textbooks and other materials which will be provided by the National Open University of Nigeria. Each unit contains activities and tutor-marked assignments for assessment purpose.

There is a final examination at the end of the course.

There are two parts of assessment of the course. First answering the tutor- marked assignments, and second there is a written examination. When computing the assignments, it is expected of you to apply the knowledge required during the course. There are thirty tutor-marked assignments in this course and you are encouraged to attempt all. However, you only need to submit twelve of the thirty assignments. The highest five of the twelve marks will be counted.

Each of the five assignments counts 8% toward your total course marks (8% X 5) = 40%. The final written examination for this course will be of three hours duration and will have a maximum value of 60% of the total grade.

The examination will consist of questions which reflect the course content.

Table 1: Marking Scheme

Assignment	**Marks**
Assignments 1-12	Ten assignments, best five of the ten counts 8% each (8 X 5 = 40%) of course marks
Final examination	60% of overall course marks
TOTAL	**100% OF COURSE MARKS**

The time between completing the last unit and sitting for the examinations will consist of questions, which reflect the course content.

The time between completing the last unit and sitting for examination should be used to revise the course. It may be useful to review your activities and tutor- marked assignments before the examinations.

The breakdown of the course marking scheme can be read from this table.

One of the great advantages of distance learning is that you can read through specially designed materials at your own pace, and at a time and place that suit you best.

It may take place in an isolated village with a hurricane lamp or in an urban centre with electricity but the lectures (replaced by study units) is the same.

Just as a lecturer might give you an in-class exercise, your study unit provides activities and tutored marked assignments for you to do at appropriate points.

Each of the units follows a common format in this sequence:- introduction to the subject matter, objectives (let you know what you should be able to do by the time you have completed a particular unit); the main body of the unit (guides you through the required reading with activities), conclusion, summary, tutor-marked assignments; and further readings. Activities are meant to help you achieve the objectives of the unit and prepare you for the tutor-marked assignments and the final examination. When you have submitted an assignment to your tutor, do not wait for its return before commencing work on the next unit. When the marked assignment is returned, go through the comments of your tutor carefully and mail any questions or any difficulty encountered to him/her.

MODULE 1 THE CONCEPT OF PLANNING AND PLANNING PROCEDURE

UNIT 1 THE CONCEPTS OF PLANNING AND PLANNING PROCESS

CONTENT

1.0 INTRODUCTION

Planning is based on the theory of "thinking before acting". Planning is an integral part of our life. We make plans in each and every step of life whether it is to go to school or to buy household goods during shopping. We make plans according to the limitations of our budget and resources to get maximum satisfaction and to fulfill goals from out activities.

Planning is the most basic and primary function of management. It is the pre-decided outline of the activities to be conducted in the organization. Planning is the process of deciding when, what, when where and how to do a certain activity before starting to work.
It is an intellectual process which needs a lot of thinking before a formation of plans. Planning is to set goals and to make certain

guidelines achieve the goals. Also, Planning means to formulate policies, segregation of budget, future programs etc. These are all done to make the activity successful.

All other function of management is useless if there is not proper planning system in an Organization. So planning is the basis of all other functions. Thus Planning is the map or a blueprint for the organization.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain why Planning is very important in our society
- explain the concept of planning in different ways
- outline the types of planning based on the factor originating it

3.0 MAIN CONTENT

3.1 Definitions of Planning

According to **Theo Haimann**, "Planning is deciding in advance, what is to be done. When a manager plans, he projects a course of action for the future, attempting to achieve a consistent, coordinated structure of operations aimed at the desired results."
According to **Alford and Beaty**, "Planning is the thinking process, the organized foresight, the vision based on fact and experience that is required for intelligent action."
According to **ME. Hurley**, "Planning is deciding in advance what is to be done. It involves the selection of objectives, policies, procedures and programs from among alternatives." (Sharma, Surendra Raj; Jha , Surendra Kumar; 53-60)

3.2 Types of Planning

Any organization can have different plans. We can classify the types of plans in the following ways:

3.3 On the basis of Nature

- **Operational Plan:** Operational plans are the plans which are formulated by the lower level management for short term period of up to one year. It is concerned with the day to day operations of the organization. It is detailed and specific. It is usually based on past experiences. It usually covers functional aspects such as production, finance, Human Resources etc.

- **Tactical Plan:** Tactical plan is the plan which is concerned with the integration of various organizational units and ensures implementation of strategic plans on day to day basis. It involves how the resources of an organization should be used in order to achieve the strategic goals. The tactical plan is also known as coordinative or functional plan.
- **Strategic Plan:** Strategic plan is the plan which is formulated by the top level management for a long period of time of five years or more. They decide the major goals and policies to achieve the goals. It takes in a note of all the external factors and risks involved and makes a long-term policy of the organization. It involves the determination of strengths and weaknesses, external risks, mission, and control system to implement plans.

3.3.1 On the Basis of Managerial Level

- **Top level Plans:** Plans which are formulated by general managers and directors are called top-level plans. Under these plans, the objectives, budget, policies etc. for the whole organization are laid down. These plans are mostly long term plans.
- **Middle-level Plans:** Managerial hierarchy at the middle level includes the departmental managers. A corporate has many departments like purchase department, sales department, finance department, personnel department etc. The plans formulated by the departmental managers are called middle-level plans.
- **Lower level Plans:** These plans are prepared by the foreman or the supervisors. They take the existence of the actual workplace and the problems connected with it. They are formulated for a short period of time and called short term plans.

3.3.2 On the Basis of Time

- **Long Term Plan:** Long-term plan is the long-term process that business owners use to reach their business mission and vision. It determines the path for business owners to reach their goals. It also reinforces and makes corrections to the goals as the plan progresses.
- **Intermediate Plan:** Intermediate planning covers 6 months to 2 years. It outlines how the strategic plan will be pursued. In business, intermediate plans are most often used for campaigns.
- **Short-term Plan:** Short-term plan involves pans for a few weeks or at most a year. It allocates resources for the day-to-day business development and management within the strategic plan. Short-term plans outline objectives necessary to meet intermediate plans and the strategic planning process.

3.3.3 On the Basis of Use

- **Single Plan:** These plans are connected with some special problems. These plans end the moment of the problems to be solved. They are not used, once after their use. They are further re-created whenever required.
- **Standing Plan:** These plans are formulated once and they are repeatedly used. These plans continuously guide the managers. That is why it is said that a standing plan is a standing guide to solving the problems. These plans include mission, policies, objective, rules and strategy.

Hence these are the basic types of plans in any organization (Shrestha: Pg. 58-65).

3.4 Planning Process

Planning is a complex process which requires high level of studies and analysis. Process of planning includes the determination of objectives and outlining the future actions that are needed to achieve these objectives. To create a plan there must be determination of objectives and outlining of the course of action to achieve the goals. There is no set formula for planning. A planning process which is suitable for one kind of organization may not be suitable for another type of organization.

3.5 Guidelines in the Formulation of a Good Plan

1. **Analysis of the environment**: Planning begins with the awareness of the opportunities in the external environment and within the organization. For this SWOT analysis is most suitable. Strength and weaknesses are the internal factors whereas opportunities and threats are the environmental factors which are to be analyzed.
2. **Setting the objectives**: The second step of planning is to set objectives and goals for the organization as a whole and for each department. Long term, as well as short-term plans, are to be created. Objectives are specified to each and every manager and department head. Objectives give direction to the major plans. So managers should have an opportunity to contribute their ideas for setting their own objectives and of the organization.
3. **Develop premises**: Planning premises are the assumptions about the future on the basis of which the plans will be ultimately formulated. Planning premises are the key to the success of planning as they supply pertinent facts and information regarding the future such as general economic conditions, production cost,

and prices, probable competitive behavior, governmental control etc. Forecasting is an essential part of premises.

4. **Determine and evaluate alternatives:** The fourth step is to search and identify the alternative course of action. It suggests that a particular objective can be achieved through numerous ways. But the most relevant alternatives must be listed down so that selection is made easier. Once various alternatives are identified, they must be well analyzed with their strong and weak points.
5. **Selection of Best Alternative**: This is the point where the certain plan is adopted. When the alternatives are determined most suitable alternative must be chosen out from the list which can give maximum output with minimum risk.
6. **Formulation of a derivative plan**: Derivative plans are the backing plans which are very essential. Once the basic plan has been formulated, it must be translated into day to day operation of the organization. Middle and low-level managers must draw up the appropriate plans, programs and budget for their sub-units.
7. **Budget formulation**: After decisions are made and plans are set the next step is giving them sufficient funds to carry them out. Optimum budgeting must be done for every course of action.
8. **Implementation of a plan**: Once the plans are set up, now the plans must be well informed and shared with the employees and managers expecting full commitment and trust. Finally, the plans must be carried out.
9. **Follow up action**: Obviously once a plan is carried out it generates certain output. The progress must be well monitored and managers need to check the progress of their plans so they can take necessary steps to improve the plans if needed.
10. Hence these are the nine steps to formulate a proper plan.

3.6 Types of Planning Process

1. Planning Hierarchy

The concept of the feeling of the plans at the different hierarchical levels can be understood a great deal with the help of the planning hierarchy. Here the different plans are treated as the hierarchy, involves going towards the lowest hierarchical plan from the broader hierarchical plan. The planning hierarchy mainly consists of the following type of the plans:

1. **Business plans –** These types of the plans include whole of the business.
2. **SBU plans –** These plans act as the strategic business unit plans including the business units.

3. **Corporate Plans –** These plans act as the plans of the organization involving its activities. It is the total plan for the whole organization, a corporate body working as a functional unit. The complete unit is covered under such plans.
4. **Departmental plans –** These plans are also referred to as the functional unit plans and cover the branches, the projects, the departments, the units that are separated for the functional efficiency.

2. Conceptual planning

Provides some type of the guidance for the planning but the major drawback in this type of the planning is that the planning unit is not at all visible, whose presence is very much critical in the planning. The conceptual planning must consist of the following:

1. **Policy –** One time decision i.e. usually effective for a length of the time.
2. **Objectives –** Focus direction of an achievement and the general outcome.
3. **Goals –** Very well defined quantitative or the numerical objectives by the end of a particular period with the plan. The practical orientation to the implementation of the plans is obtained here.
4. **Procedures –** Process rules that are carrying out the action.
5. **Rules –** Fixed direction unless expressly revised.
6. **Budgets –** Plans converted to the quantities and in the terms of the money having the feature of the interpretation in the statistical and the accounting terms.
7. **Vision Statement –** The statement includes the purpose operating for the future and then to take the others in the vision fold of the organization.
8. **Mission –** The purpose of offering the goods and the services in the terms of the beneficiary.
9. **Variable plans –** In order to satisfy the different types of the contingencies, it is a necessity to draw different types of the plans. The variations may include drawing a realistic plan and then following this step by the preparation of an optimistic and pessimistic plan.

3. The Plan document

For getting a planned document, all the above steps are performed and during this, one particular thing to keep in mind is that the plan must start with the broader objectives and must be linked step by step to the

actionable and the implementation activity. The plan document must consist of the following:

a. **Premising –** This step is needed at the each stage of the planning. Before undertaking the plan, the strength, the weakness, the opportunity and the threats (SWOT) can be calculated depending on the premises.
b. **Vision –** The way in which we visualize our future.
c. **Mission –** What we aim to deliver to the beneficiaries.
d. **Policy –** What restrictions on means we will note during the execution of the plan.
e. **Objectives –** What we will keep as the broad directions for the achievement.
f. **Goals –** Translate the objectives into the quantitative and the financial goals, which can be achieved by the operational people.
g. **Procedures –** To prioritize and then draw the sequence of the action.
h. **Budget –** Convert to the money terms in order to establish the standards for the evaluation.

4. The program

Whenever any activity is carried out, it is carried out to achieve one thing or the other. But the results that one expects to be obtained must be achieved in the proper frame of the time, so that they can be used at the right time for various other activities. Hence, in order to get the results within the certain time frame, a program is drawn.

The projects of the diverse nature within a subject are included in the program. The program is actually a clubbing together of the things and for getting a good view of the word program, it can be understood as the plan document on a much wider scale than the planning document.

3.7 Factors Leading to the Failure of the Planning

1. Inadequate Preparation.
2. Lack of the study.
3. Lack of the vision mars planning efforts.
4. Becomes very haphazard when it is done for a certain group and when many plans are built based on the compromises.
5. Lack of clarity in the objectives and the goals.
6. Absence of the feedback.
7. Lack of the staff control.
8. Inadequacy in defining the various businesses.
9. Absence of the review.

4.0 CONCLUSION

Whatever we do or perform in our day today life, which may include doing some work at the job or may be doing some work at the home, to do it in an efficient way and to obtain good results it is very necessary to plan every – thing so that one is prepared for the various activities involved in the process and is able to face any type of the problem that may arise during the process.

We can always learn from the past and at the same time we can also plan for the future, depending on the past and the present. But one major fact is that we can act or take any type of the action only in the present. The mistakes that have been committed in the past can be improved by taking various steps in the present. In the future we can only plan and think but cannot perform anything but when the time for the action comes, it becomes easy to understand everything and take any type of the action with more ease.

Very careful thinking and the planning is very essential, as it saves a lot of time and also the cost is brought down. Hence, the planning can be defined as the process of deciding the future course of the actions in terms of the time, the performance and the cost.

5.0 SUMMARY

In the process of the planning, the importance of the time is very much critical in the nature and has been regarded as the most important criteria in the process of the planning, by the various system analysts. It is very important that we look into the future and then plan everything and get prepared and ready for the different types of the situations that may arise but one very important point to remember here is that whole the time we cannot and should not look into our future. We should look as far as we think it’s worthwhile to do something in the present to make such a future feasible in the nature.

The planning is not just to think about the future but it also involves the forecasting and the prejudging of the future and then forming some lines of the action. The more one thinks of the future, the more one is able to amend the present.

The words short term and the long term indicate the comparison of the time. The short run can be defined as a clear foreseeable future for which the definite actions can be taken but in the case of the long run, one can surely foresee but various definite actions cannot be taken like in the case of the short run. The above explained points are very important to be understood as the whole concept of the planning is largely based on these references.

The decisions that are taken in the short run can sometimes prove to be very inconsistent in the nature. With the longer run thinking, more stability creeps into the operations of the business but these decisions are also accompanied with more number of the risks of various things going wrong.

6.0 TUTOR-MARKED ASSIGNMENT

1. Planning is said to be more than just the formulation of quantitative economic targets.
2. It is often described as a process. What is meant by the planning process, and what are some of its basic characteristics?

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 DEVELOPMENT PLANNING

CONTENTS

1.0 INTRODUCTION

In the initial decades after World War II and decolonization, the pursuit of economic development was reflected in the almost universal acceptance of development planning as the surest and most direct route to economic progress.

Until the 1980s, few people in the developing world would have questioned the advisability or desirability of formulating and implementing a national development plan. Planning had become a way of life in government ministries, and every five years or so, the latest development plan was paraded out with great fanfare.

Development planning was widely believed to offer the essential and perhaps the only institutional and organizational mechanism for overcoming the major obstacles to development and for ensuring a sustained high rate of economic growth.

To catch up with their former rulers, poor nations were persuaded that they required a comprehensive national plan. The planning record, unfortunately, did not live up to its advance billing. But a comprehensive development policy framework can play an important role in accelerating growth, reducing poverty, and reaching human development goals.

2.0 OBJECTIVES

The main objective is to examine the roles and limitations of planning and development policymaking as practiced in developing nations.

At the end of this unit, you should be able to:

- define development planning
- explain the categories of development planning
- explain the rationale for development planning.

3.0 MAIN CONTENT

3.1 Definition of Development Planning

Development planning happens in many different contexts so to define it succinctly is tricky. Basically development planning refers to the strategic measurable goals that a person, organization or community plans to meet within a certain amount of time. Usually the development plan includes time-based benchmarks. It generally also includes the criteria that will be used to evaluate whether or not the goals were actually met.

3.2 Categories of Development Planning

3.3 Nonprofit Development Planning

Development has a particular meaning for nonprofit organizations such as universities and charitable groups. In this context, development planning refers to all of the various activities related to fund raising: grant writing, donor relations, capital campaigns, annual fund drives and fund-raising events. The larger the organization, the more likely it is to employ a development officer who may be responsible for a whole department devoted to development. In short, the development officer elicits and coordinates the donated revenues that make up a large portion of any nonprofit budget. Development planning for a nonprofit organization means to set calendar milestones for the fund-raising goals and then figure out what activities must be done to achieve them.

3.3.1 Personal Development Planning

Many employers ask their employees to write down their personal goals in a formal process that they call personal development planning. One person may write a development plan that is focused on advancing her career through additional education. Another person's development plan may involve planning for retirement, while still another person's development plan might include losing a specific amount of weight or starting a program of exercise. Usually some of the personal development plan goals have to relate to the job itself, but progressive companies like Monsanto, for example, encourage the employees to set targets that are specifically meaningful to the individual. The personal development plan may become part of a company's annual review process.

3.3.2 Individual Development Planning

Post-doctoral fellows use a development planning process to organize their plan of study into a document called the Individual Development Plan, or IDP. This provides a mechanism for the fellow to assess himself. Then he has a set of written goals for future growth or achievement based on a time line for which, according to the plan, he is held accountable by a mentor.

3.3.3 Professional Development Planning

Several states including Missouri and Wisconsin require state certified teachers to create a professional development plan. This document is a permanent part of the teacher's personnel file. In it, teachers write goals related to their career, about what they intend to do to become more effective in the classroom, and about how they will fulfill the requirements to obtain continuing education credits. Teachers who fail to produce a professional development plan on time may risk losing their teacher certification in the states which require one. The school principals or district supervisors hold teachers accountable for the goals in the development plan.

3.3.4 Urban Development

Development planning also happens in cities and communities. Urban communities with a lot of vacant buildings may decide to engage in a development planning process to plan how to revitalize an area. This is a necessary step in order to qualify for state tax credits and federal and other funds that will allow the renovations to happen. From architects, to city planners, engineers, investors and residents, everyone who will be involved in the actual development should be part of the development planning process.

3.4 The Rationale for Development Planning

The early widespread acceptance of planning as a development tool rested on a number of fundamental economic and institutional arguments. Of these we can single out four as the most prominent.

3.4.1 Market Failure

Markets in developing economies are permeated by imperfections of structure and operation. This argument is perhaps the most often quoted reason for the expanded role of government in less developed countries. It is a phenomenon that results from the existence of market imperfections (e.g., monopoly power, lack of factor mobility, significant externalities, lack of knowledge) that weaken the functioning f a market economy.

There are three general forms in which market failure can be observed:

- The market cannot function properly or no market exists;
- the market exists but implies an inefficient allocation of resources;
- the market produces undesirable results as measured by social objectives other than the allocation of resources.

Market failures can occur in situations in which social costs or benefits differ from the private costs or benefits of firms or consumers; public goods, externalities, and market power are the best-known examples. With public goods, "free riders" who do not pay for the goods cannot be excluded except at high cost; it is economically inefficient to exclude nonpaying individuals from consuming these goods. With externalities, consumers or firms do not have to pay all the costs of their activities or are unable to receive all the benefits. Coordination failures occur when several agents would be better off if they could cooperate on actions if all or most agents participated but worse off taking the action if too few participated. Moreover, economic development is a process of structural change. The market may be efficient in allocating resources at the margin, allowing certain industries to emerge and others to fail, but may be ineffective in producing large discontinuous changes in the economic structure that may be crucial to the country's long-term development. Market power occurs when firms can influence price by restricting quantity, a power most common under increasing returns to scale. Capital markets are particularly prone to failure due to their intrinsic connection to information generation and transmittal; information has public-good properties.

A more equal distribution of income itself can be considered a public good when it is an agreed social objective. There may be concern for the well-being of future generations, who cannot participate in today's economic or political markets. Merit goods, such as health, education, and basic welfare, can also be considered public goods or social entitlements guaranteed by government.

But concerns about distribution and merit goods are often treated as separate rationales for policy because their levels are generally viewed as outside the realm of economic efficiency.

Unfortunately, we cannot jump to the conclusion that if economic theory says policy can fix market failures, it will do so in practice. Government failure may also occur in the many cases in which politicians, bureaucrats, and the individuals or groups who influence them give priority to their own private interests rather than to the public interest.

Analysis of incentives for government failure helps guide reforms such as constitution design and civil service rules. Developing countries tend to have both high market failure and government failure.

The capital embodied in roads, railways, waterways, airways, and other forms of transportation and communication plus water supplies, electricity, and public services such as health and education play great role in integrating markets and modifying prices. Moreover, the failure of the market to price factors of production correctly is further assumed to lead to gross disparities between social and private valuations of alternative investment projects. In the absence of governmental interference, therefore, the market is said to lead to a misallocation of present and future resources or, at least, to an allocation that may not be in the best long-run social interests.

3.4.2 Resource Mobilization and Allocation

This argument stresses that developing economies cannot afford to waste their very limited financial and skilled human resources on unproductive ventures. Investment projects must be chosen not solely on the basis of partial productivity analysis dictated by individual industrial capital-output ratios but also in the context of an overall development program that takes account of external economies, indirect repercussions, and long-term objectives. Skilled workers must be employed where their contribution will be most widely felt. Economic planning is assumed to help by recognizing the existence of particular constraints and by choosing and coordinating investment projects so as to channel these scarce factors into their most productive outlets. In contrast, it is argued, competitive markets will tend to generate less investment and to direct that investment into areas of low social priority (e.g., consumption goods for the rich).

3.4.3 Attitudinal or Psychological Impact

It is often assumed that a detailed statement of national economic and social objectives in the form of a specific development plan can have an important attitudinal or psychological impact on a diverse and often fragmented population. It may succeed in rallying the people behind the government in a national campaign to eliminate poverty, ignorance, and disease or to boost national prowess. By mobilizing popular support and cutting across class, caste, racial, religious, or tribal factions with the plea to all citizens to work together toward building the nation, it is argued that an enlightened central government, through its economic plan, can best provide the needed incentives to overcome the inhibiting and often divisive forces of sectionalism and traditionalism in a common quest for widespread material and social progress.

3.3.4 Foreign Aid

The formulation of detailed development plans has often been a necessary condition for the receipt of bilateral and multilateral foreign aid.

With a shopping list of projects, governments are better equipped to solicit foreign assistance and persuade donors that their money will be used as an essential ingredient in a well-conceived and internally consistent plan of action. The requirement that developing countries must put an approved plan in place to receive various forms of assistance remains at least as true in this century as it was in the last.

3.5 The Nature of Development Planning

3.5.1 Economic Planning

May be described as a deliberate governmental attempt to coordinate economic decision making over the long run and to influence, direct, and in some cases even control the level and growth of a nation's principal economic variables (income, consumption, employment, investment, saving, exports, imports, etc.) to achieve a predetermined set of development objectives.

3.5.2 Economic Plan

Is simply a specific set of quantitative economic targets to be reached in a given period of time, with a stated strategy for achieving those targets. Economic plans may be comprehensive or partial.

3.5.3 Comprehensive Plan

Sets its targets to cover all major aspects of the national economy.

3.5.4 Partial Plan

covers only a part of the national economy-industry, agriculture, the public sector, the foreign sector, and so forth.

3.5 Planning Process

It can be described as an exercise in which a government first chooses social objectives, then sets various targets, and finally organizes a framework for implementing, coordinating, and monitoring a development plan. Proponents of economic planning for developing

countries argue that the uncontrolled market economy can, and often does, subject these nations to economic dualism, unstable markets, low investment in key sectors, and low levels of employment. In particular, they claim that the market economy is not geared to the principal operational task of poor countries: mobilizing limited resources in a way that will bring about the structural change necessary to stimulate a sustained and balanced growth of the entire economy. Planning has come to be accepted, therefore, as an essential and pivotal means of guiding and accelerating economic growth in almost all developing countries.

4.0 CONCLUSION

The principal economic arguments for planning briefly outlined earlier in this unit-market failure, divergences between private and social valuations, resource mobilization, investment coordination, and the like-have often turned out to be weakly supported by the actual planning experience. It is doubtful whether plans have generated more useful signals for the future than would otherwise have been forthcoming; governments have rarely, in practice, reconciled private and social valuations except in a piecemeal manner; because they have seldom become operational documents, plans have probably had only limited impact in mobilizing resources and in coordinating economic policies.
To take the specific case of the market failure argument and the presumed role of governments in reconciling the divergence between private and social valuations of benefits and costs, the experience of government policy in many developing countries has been one of often *exacerbating* rather than reconciling these divergences—**government failure** rather than market failure. Government policy often tends to increase rather than reduce the divergences between private and social valuations.

5.0 SUMMARY

The results of development planning have been generally disappointing. The widespread rejection of comprehensive development planning based on poor performance has had a number of practical outcomes, the most important of which is the adoption in a majority of developing countries of a more market-oriented economic system.

Government policy often tends to increase rather than reduce the divergences between private and social valuations. Plans are often overambitious. They try to accomplish too many objectives at once without consideration that some of the objectives are competing or even conflicting. They are often grandiose in design but vague on specific policies for achieving stated objectives.

The economic value of a development plan depends to a great extent on the quality and reliability of the statistical data on which it is based. When these data are weak, unreliable, or nonexistent, as in many poor countries, the accuracy and internal consistency of economy-wide quantitative plans are greatly diminished. And when unreliable data are compounded by an inadequate supply of qualified economists, statisticians, and other planning personnel (as is also the situation in most poor nations), the attempt to formulate and carry out a comprehensive and detailed development plan is likely to be frustrated at all levels. Because most developing countries have open economies that are dependent on the vicissitudes of international trade, aid, "hot" speculative capital inflows, and private foreign investment, it becomes exceedingly difficult for them to engage in even short-term forecasting, let alone long-range planning.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is meant by the planning process, and what are some of its basic characteristics?
2. List and explain some of the major reasons for plan failures. Which reasons do you think are the most important? Explain your thinking.
3. Distinguish between market failure and government failure.

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UNIT 3 AGRICULTURAL DEVELOPMENT PLANNING

CONTENTS

1.0 INTRODUCTION

This unit will critically examine agricultural development planning which are a conscious, sustained and systematic attempts or efforts made by the government to utilize the available agricultural resources of the nation to the benefit of the farmers and the teeming population. Planning gives room for effective implementation of the programme. This is a step further for the implementation of the agricultural programmes and projects. The vital role of the agricultural sector in the economic development of any nation has really prompted this unit to give a better understanding of this course hence effective panning is a major tool to proper or adequate implementation.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the importance of planning in agricultural sector;
- examine the various reasons for agricultural planning; and
- understanding agricultural development plan.

3.0 MAIN CONTENT

3.1 Definition

Agricultural development planning is a conscious sustained and systematic attempts or efforts made by the government to utilize the available agricultural resources of the nation to be benefit of the farmers and the teeming population. The ultimate goal is sustained increase in the farmers' income, standard of living and food security of the country. It is a conscious effort to guide the development of the agricultural sector to accelerate economic development of the country.

3.2 Importance of Planning Agricultural Development

It is important to plan agricultural development of any nation for the following reasons:

1. The vital role of the agricultural sector in the economic development of a nation calls for adequate and effective planning of the sector's development.
2. Consequent upon the above, agricultural planning often forms part of the national development plan and this reflects the attitude and hence the objectives of the government or ruling class to the agricultural sector of the country.
3. It ensures that the whole country is evenly developed. All regions, states, local government areas, wards and villages are attended to.
4. Agricultural planning ensures that farmers particularly peasants have access to modern technologies such as irrigation facilities, which are beyond their capability die to lack of capital.
5. Agricultural planning ensures that the desired agricultural production pattern for the country is achieved. Production patterns should be left to market forces to determine. If market forces place high value on particular crops such as cocoa or rice, the tendency is for farmers to shift all resources to the production of these crops. This action will lead to scarcity of other crops and increase in their prices. Thus, the situation needs to be arrested through planning.
6. Planning also enables the economy to cope with problems of uncertainty in agricultural production consequent upon occurrence of natural hazards such as floods, drought, pest attack etc. Management of these risks necessitates effective agricultural development planning.

3.3 The Necessary Steps

The following steps are taken in planning agricultural development sector based on the sector's problems.

1. Identification of the social economic and institutional needs of the agricultural sector based on the sector's problems.
2. Formulation of realistic agricultural development policy objectives.
3. Design of strategies by which policy objectives may be achieved.
4. Estimation of the available agricultural resources with the performance of the agricultural sub-sectors' crop, livestock, fisheries, forest and wildlife etc.
5. Projecting the expected production and identifying the demand supply gaps.
6. Setting of achievable targets based on the above information.
7. Translating these into programmes of actions and projects to be executed.
8. The projects are monitored and evaluated in accordance with the set targets and the overall policy objectives.

3.4 Agricultural Development Plan

Agricultural development plan is the immediate output of agricultural development planning process. It is therefore and arrangement for agricultural development worked out or designed in advance such that the stated agricultural development policies can be achieved. It embodies the whole information, activities and the roles and responsibilities of the various tiers of government and private sector for achieving the policies. The information includes, identified problems, constraints, available resources and facilities, present situation of the sector, policy objectives, and policy instruments institutional arrangements for implementation of the policies, programmes, and projects and estimated monetary allocation for the execution of the subsectoral projects. The National Development Plan which used to be of 5 years duration now referred to as National Rolling Plan (2 year plan period) is in booklet form published by the planning office of the Federal Ministry of Budget and Planning.

SELF-ASSESSMENT EXERCISE

i. list four importance of planning.
ii. what is agricultural development plan?

3.5 Problems of Planning Agricultural Development

Problems of planning agricultural development are:

1. Lack of definite and consistent agricultural development policy.
2. Inadequate agricultural development planners.
3. Inadequate administrative and managerial machinery for effective implementation of agricultural development plan.
4. Lack of adequate data for effective planning.
5. Inability of farmers to keep accurate farm records.
6. Reluctance by farmers to keep accurate farm records in releasing same
7. Institutional problems of land tenure system in the country.

3.6 Perspective Plan

It was mentioned in the preceding section that policy and plan have definite beginning and period and period within which the stated objectives must be achieved. This is one of the criteria utilized in monitoring and evaluating the performance of the sector.

Nevertheless government actions to influence economic activities often go beyond the plan period. Hence, a futuristic approach to development plan is adopted. A perspective plan is a futuristic plan used as a mechanism of policy discipline to achieve the following objectives.

1. To enable the government link the past present and future policies in order to facilitate orderly transition or ensure smooth continuity.
2. Identification and resolution of possible conflicts among agricultural I development policy objectives and between agricultural objective and those of the overall economy.
3. It enables the government modify programmes and projects and identify areas requiring new strategies approaches.

In perspective planning, the government projects beyond the prevailing economic conditions to ensure a more stable and healthy investment environment for economic and social development of the country. Perspective plans ensure that government goals in agricultural development are fulfilled in accordance with set objectives and operational modalities.

SELF-ASSESSMENT EXERCISE

What are the problems of planning agricultural development?

4.0 CONCLUSION

Agricultural development planning is a conscious effort to guide the development of the agricultural sector to accelerate economic development of the country.

5.0 SUMMARY

This unit has been able to identify the importance of planning in agricultural sector knowing fully the contributions of the agricultural to the economic development of the country. It has also examined the various reasons for planning in agricultural sector.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the major problems militating against the planning of agricultural development
2. a. What is agricultural development planning?
   b. Enumerate five importance of planning agricultural development.

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MODULE 2 PROJECT IDENTIFICATION, APPRAISAL, IMPLEMENTATION AND EVALUATION

UNIT 4: MEANING OF PROJECT

CONTENTS

1.0 INTRODUCTION

A piece of planned work or an activity that is finished over a period of time and intended to achieve a particular purpose. A project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end. The end is reached when the project‟s objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists. A project may also be terminated if the client (customer, sponsor, or champion) wishes to terminate the project.

Temporary does not necessarily mean the duration of the project is short. It refers to the project‟s engagement and its longevity. Temporary does not typically apply to the product, service, or result created by the project; most projects are undertaken to create a lasting outcome. For example, a project to build a national monument will create a result expected to last for centuries. Projects can also have social, economic, and environmental impacts that far outlive the projects themselves.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the meaning of project
- describe the various underlying characteristics of a project.

3.0 MAIN CONTENTS

3.1 Definition of Project

Project has been defined in various ways. Some authorities see projects as mere activities while others see them as programmes of action. Longman Dictionary of Contemporary English defines a project as “an important and carefully planned piece of work that is intended to build or produce something new, or to deal with a problem”. From this simple definition, we can see that a project, apart from being Important, should be carefully planned so as to produce something. Some of the things that a project seeks to produce may be tangible or intangible. A motorcycle is a tangible product but conducting a census is not a tangible product.

Also, A project is a temporary endeavor undertaken to create a unique product, service, or result. Like most organizational effort, the major goal of a project is to satisfy a customer‟s need. Beyond this

fundamental similarity, the characteristics of a project help different iate it from other endeavors of the organization.

3.2 Types of projects – competitive and individual projects

A. Competitive projects

The projects are selected as a result of an open or closed project contest announced and conducted by particular Implementing Authorities (2nd level Intermediate Bodies) which is responsible for implementation of a given measure. Selection of these projects is performed with respect for the principle of disclosure and access to information according to the criteria of project selection adopted by the Programme Monitoring Committee (the document is available in the section Programming Documentation).

The process of project selection consists of the following stages:

1. call for proposal,
2. submission of projects,
3. formal evaluation and content-related evaluation of applications,
4. publication of the contest results,
5. review procedures (if needed),
6. signing contracts on financing projects,
7. registration of documents in the information system, according to separate provisions in areas concerned (the first registration after the formal evaluation of the application for support).

B. Individual projects

Individual projects are investments of strategic significance for the Programme implementation, indicated by the Managing Authority, after the recommendation of the competent Intermediate Body, according to strategic criteria approved by the Programme Monitoring Committee. Individual projects are undertakings whose implementation is important and justified concerning the implementation of the strategy of a given sector or area and which contribute to a large extent to achieving objectives of a priority axis a given projects is implemented under. Placing the project on the list is only a conditional declaration of its financing and is connected with guarantying funds for its implementation within the project budget. These projects will not be subject to content procedure and will not apply for the funds under the content procedure. The project implementation will depend on fulfilling the selection criteria approved by the Programme Monitoring Committee, requirements concerning documentation and implementation readiness as well as acceptance of the application for support with annexes required by the MA.

3.3 Characteristics of a Project

There a number of key “project” characteristics. These characteristics are elements that make a project a project.

These seven characteristics are;

1. **A single definable purpose, end-item or result.** This is usually specified in terms of cost, schedule and performance requirements.
2. **Every project is unique.** It requires the doing of something different, something that was not done previously. Even in what are often called "routine" projects such as home construction, the variables such as terrain, access, zoning laws, labour market, public services and local utilities make each project different. A project is a one-time, once-off activity, never to be repeated exactly the same way again.
3. **Projects are temporary activities.** A project is an ad hoc organization of staff, material, equipment and facilities that is put together to accomplish a goal. This goal is within a specific time-frame. Once the goal is achieved, the organization created for it is disbanded or sometimes it is reconstituted to begin work on a new goal (project).
4. **Projects cut across organizational lines.** Projects always cut across the regular organizational lines and structures within a firm. They do this because the project needs to draw from the skills and the talents of multiple professions and departments within the firm and sometimes even from other organizations. The complexity of advanced technology often leads to additional project difficulties, as they create task interdependencies that may introduce new and unique problems.
5. **Projects involve unfamiliarity.** Because a project differs from what was previously done, it also involves unfamiliarity. And oft time a project also encompasses new technology and, for the organization/firm undertaking the project, these bring into play significant elements of uncertainty and risk.
6. **The organization usually has something at stake when undertaking a project.** The unique project "activity" may call for special scrutiny or effort because failure would jeopardize the organization/firm or its goals.
7. **A project is the process of working to achieve a goal.** During the process, projects pass through several distinct phases, which form and are called the project life cycle. The tasks, people, organizations, and other resources will change as the project moves from one phase to the next. The organizational structure and the resource expenditures build with each succeeding phase; peak; and then decline as the project nears completion.

3.4 Classification of Project

The projects are basically defined in two aspects or categories: one is defensive project and other is aggressive project.

Defensive Project: Is the project initiated to stabilize and sustain the current business situation.

Aggressive Project: Is the project initiated to enter into new business in a commercial manner and majorly depends upon the future prospective rather than the current scenario.

There is other classification of projects as well which is based on the need of execution and the time, these can be categorized as:

Normal Project: Where the time limits are set and adequate.

Brash Project: Where additional cost are involved to gain time.

Disaster Project: Anything is allowed to gain time.

Projects can be further classified into various other classifications like national and international projects, industrial and non-industrial projects, on the basis of technology, size, ownership, public or private projects, need, expansion or diversification projects.

Each of these is discussed as follows:

1. **National and International Projects:** This kind of projects is categorized on the basis of geographical location set as countries. If one country tries to build projects with other foreign country, such projects are said to be International projects and when it is done in one‟s own country, then it is said to be a domestic or national project.

2. **Industrial and Non-industrial Projects:** The projects initiate in one‟s own country with an objective to make money and for commercialization, are called industrial projects. For example, a car manufacturing is an industrial project. While the project which are done for the upliftment of the society and majorly done with social welfare objectives, are called non-industrial projects. For example Building of a canal, agricultural development comes under non-industrial projects; these are mainly carried up by the government.

3. **Projects based on Technology:** These are largely high technology projects which require lots of investment and works on new or non-existent technologies like rocket launch project, space projects, etc. and some other are those projects which use technology which are already proven like a software ERP project, automobile automation project, etc.

4. **Projects based on its size:** These projects are based on investment size or capacity of plant to offer goods or services. This can be further classified down to small, medium and large scale projects. Project above the investment of 100 million dollars is considered as large projects.

5. **Project based on ownership:** This can be further classified as public sector project, private sector project and joint sector project.

i. **Public Sector Projects:** Projects which are of the state, center or both forms of governments, are known as public sector projects.

ii. **Private Sector Projects:** Projects with a complete ownership of promoters and investors is known as private sector projects. Owners may be an individual, partnership firm or a company. These projects are mostly done with an objective to earn profit and thus have a commercial nature.

iii. **Joint Sector Projects:** In these projects, there exist a partnership between the entrepreneurs and the government; it may be from state

government or the central government. These types of partnership occur on the grounds of expertise and laisioning work and government arranges for the fund in large amounts. For example, Project of Metro Train, Dams, Information technology parks, Electricity plants and other similar natured projects.

6. **Need based projects:** Projects are basically driven by certain needs of the organization and these needs furthers forms the basis of project categorization as Balancing Project, Modernization Project, Expansion Project, Diversification Project, Rehabilitation Project and Plant Relocation Project.

i. **Balancing Project:** Augmenting or strengthening the capacity of particular area within a chain of entire production plant with a purpose of scaling to the capacity in order to have optimum utilization, is balancing project.

ii. **Modernization Project:** Upgrading the technology to increase the productivity and inevitable approach of technology is called modernization project.

iii. **Expansion Project:** When the production capacity of goods and services is to be increased, the project that is undertaken is known as expansion project.

iv. **Diversification Project:** Project undertaken by the organization to completely divert from its core business is called diversification project. For example, if a Petroleum company decides to enter into Information Technology business, then the project will be known as diversification project.

v. **Rehabilitation Project:** When a project is started to revive a loss bearing company, is known as rehabilitation project.

vi. **Plant Relocation Project:** When an organization decides to shift his plant from one location to another, the project started will be known as relocation project.

3.5 Differences between Project and Programme

Many people might consider a program to be just one really large project. A *project* is a singular effort of defined duration, whereas a *program* is comprised of a collection of projects. Problem solved, right?

Actually, it‟s a bit more complex than that. While programs and projects actually have several different characteristics and different functions within an organization, they also have many commonalities. Likewise project managers and program manager are two different roles within an organization, as well, yet they share similar duties.

While the state of the industry is always changing, it behooves you and your organization to know when your projects should become programs. Let‟s look at how they‟re different and how they‟re the same so you can apply the concepts to your own programs and projects.

3.5.1 Projects and Programs: How they're Different

 Structure: A project is well-defined, with a Project Charter that spells out exactly what the scope and objectives are for the project. A program tends to have greater levels of uncertainty. The team is also bigger. The program team are supervising and coordinating the work on a number of projects so while the core team may not have that many people in, the wider team includes the project managers and all the project team members.

 Effort: This is the most significant difference between projects and programs. A project represents a single effort. It is a group of people forming a team working towards a common goal. A program is different; it is a collection of projects. Together all the projects form a cohesive package of work. The different projects are complimentary and help the program achieve its overall objectives. There are likely to be overlaps and dependencies between the projects, so a program manager will assess these and work with the project managers concerned to check that overall the whole program progresses smoothly.

 Duration: Some projects do go on for several years but most of the projects you‟ll work on will be shorter than that. On the other hand, programs are definitely longer. As they set out to deliver more stuff, they take longer. Programs tend to be split into tranches or phases. Some projects are also split like this, but not all projects last long enough to be delivered in multiple phases.

 Benefits: A project team works towards achieving certain outputs, that is, what you get at the end. For example, this could be a set of deliverables that form a software package, or a new retail branch, or whatever it is that you are working on. The benefits of a project tend to be tangible: you get a „thing‟ at the end of it. A program team works towards delivering outcomes. Outcomes can be tangible but are often not. The benefits of a program are the sum of the benefits of all the different projects and this could amount to a policy or cultural change, or a shift in the way an organization works.

SELF ASSESSMENT EXERCISE

Discuss Differences between Project and Programme.

4.0 CONCLUSION

This unit has treated the meaning of project, the characteristics, differences and it relation with programme. This is an introductory aspect to the study of project evaluation. Now that we have the basic foundation, we shall further our discussion with Project cycle as an introductory framework on project evaluation.

5.0 SUMMARY

In this unit we have discussed the meaning of project. We have seen the characteristics of project, its relation to programme and their differences.

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you understand by the Characteristics of a Project.
2. List and discuss the various objectives of a project.

7.0 REFERENCES/FURTHER READINGS

Leon Ikpe, (1999) Project Analysis and Evaluation. Lagos: Impressed Publishers.

UNIT 5: THE PROJECT CYCLE

CONTENTS

1.0 INTRODUCTION

The Project Life Cycle refers to a series of activities which are necessary to fulfill project goals or objectives. Projects vary in size and complexity, but, no matter how large or small, all projects can be mapped to the following life cycle structure: Starting the project. Organizing and preparing. Most of the projects are likely to be private sector driven. They may be manufacturing projects or they could be petrochemical or civil engineering projects. Your key task, as a project evaluator, is to carefully consider each and every project brought to your attention and see how useful or valuable they are. Our first task and which we will accomplish in this unit is to examine the concept of a project cycle. This concept is very important as it gives us an overview of projects. The knowledge so gained, will lead us throughout the duration of this course.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain a project cycle
- describe the sequences in a project cycle.

3.0 MAIN CONTENTS

3.1 The Project Cycle – Meaning and Stages

A project cycle tries to describe the various stages that are involved, from the conception of a project idea to when the project is executed or actually takes off. Understanding a project cycle is very important as it enables us to get the total picture of a project. We will now examine the various stages of a project cycle. Basically, projects consist of the projection of ideas and activities into new endeavours. As earlier discussed, projects may be public sector projects in agriculture, defense or transportation. A major railway link from Ibadan to Onitsha may constitute a major public sector project. A new brewery springing up at Enugu is a typical example of a private sector initiative. But whatever type of project that we are considering, we need to first understand what is usually known as the project cycle. So before we go into the real subject of our discussion –Project Evaluation, we need to build a strong background. This background is in the form of proper understanding of how a project is conceived. It explains who conceives a project. It also explains the flow of activities up to the execution of the project.

3.1.1 The Project Idea Stage

The project idea stage is the first stage of a project cycle. The idea about a project arises from a variety of sources within the internal environment or market place. New project ideas could originate from within an organisation or from outside the organisation. If the idea originates from within, it could be from a sales person who has encountered some success or problem with customers while performing his or her

functions. You will also realise that a new project idea could emanate from outside an organisation. Coming from outside an organisation, it could be requests from existing customers asking for bigger or better products. New project ideas may fall into any of the following categories.

• Proposal to add new products to existing lines: A company with existing product lines may decide to add new products to its existing lines.

• Proposal to expand capacity in existing lines: A company may have a proposal to expand capacity to enable it take advantage of enlarged market opportunities. We need to stress that new project ideas may originate from any level in an organisation. A factory cleaner within an organisation may come up with a new product idea. Also an executive director in an organization may also generate a new project idea.

3.1.2 The Project Identification Stage

After the project idea stage, the next stage is the project identification stage. The project identification stage consolidates the idea stage. Project ideas are not really useful unless they are clearly identified and put down in a systematic manner for further processing. The idea to introduce a new product into the market may come from a company salesman who is very familiar with the market. At the boardroom room level, the entire organisation has to see the project idea properly and clearly identify it as a possible area ofbusiness investment. The totality of the new idea would be considered.

3.1.3 The Project Evaluation Stage When a project has been identified, the next step is to evaluate the project. Project evaluation involves the estimation of the benefits and costs of a project. Benefits and costs should be measured in terms of cash flows. We have to emphasise at this point that the estimation of the cash flow of a project is a very difficult task. It is difficult in the sense that the cash flow to be estimated is future cash flow. For example in the year 2007, we will tried to estimate the cash flow for the year 2008. In a corporate setup, the evaluation of projects should be carried out by a team of experts drawn from the various departments like production, marketing, accounts and administration. The team of experts should be objective in their evaluation of projects. Alternatively, the evaluation of a project may be contracted to a third party like consultants. Contracting evaluation of projects to tends to eliminate bias.

3.1.4 The Project Selection Stage

After the project evaluation stage, the next stage is the project selection stage. Faced with an array of projects with different values and worth, there is need to select which projects to embarked upon. There is no standard procedure for selecting projects as this will differ from benefit seen. The important thing to note is that the project selection function is

a top management responsibility which in most cases goes to Board of Directors of an organisation. In selecting projects, management usually considers the financial outlays involved and matches them with the financial capabilities of the firm. For example, a firm that has only N10,000,000 (ten million naira only) be considering a new investment that involves a capital outlay o f N40,000,000 (forty million naira only) except if it can source money externally e.g., from banks.

3.1.5 The Project Execution Stage

The project execution stage is the final stage in the project cycle. After a project has been selected, it moves on to the execution stage. In most organisations, the responsibility for execution of projects is vested on a project management team raised by top management. The function of the team is to ensure that the budget for the project is spent entirely on the project and that the project is completed on schedule. In an ideal organisation, the project management team usually prepares a monthly budget consideration report on projects for top management consideration. This is important for project monitoring and control.

SELF ASSESSMENT EXERCISE

Discuss three sources of new project ideas.

4.0 CONCLUSION

This unit has treated the concept of the project cycle which is a stepping stone into our study of project evaluation. Now that we have built the necessary background, we shall be discussing Project Analysis – an introductory frame work in the next unit.

5.0 SUMMARY

In this unit we have discussed the concept of the project cycle. We have seen that it starts from the project idea stage, goes to the identification stage, to the evaluation stage. From the evaluation stage it moves to the selection stage and finally to the project execution stage.

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you understand by the term “project cycle”.
2. List and discuss the various stages involved in a project cycle.

7.0 REFERENCES/FURTHER READINGS

Leon Ikpe, (1999) Project Analysis and Evaluation. Lagos: Impressed Publishers.

UNIT 6: PROJECT EVALUATION – AN INTRODUCTORY FORMAT

CONTENTS

5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

In the second unit, we discussed the concept of the project cycle which is very crucial to our understanding of project evaluation. In this unit, we will discuss project evaluation in a proper context. In doing this, we shall build an introductory format which will assist us in our discussion.
Evaluation of a project involves a careful consideration of the totality of the project with a view to seeing how useful or valuable it is Evaluation enables us to attach proper financial value to a project and also allows us the liberty of comparing it with other projects.
You will note that an analysis is not done in a vacuum. It is usually documented. A problem usually encountered in project evaluation is how to arrange the work to make it readable or understandable.
A very simple format which we will adopt in the evaluation of projects is one that recognizes the various functional aspects or units of an organization.

2.0 OBJECTIVE

At the end of this unit, you should be able to:
• explain the format for project evaluation.

3.0 MAIN CONTENT

3.1 Project Evaluation – An Introductory Format

Evaluation is important to assess the worth or merit of a project and to identify areas for improvement. It promotes appropriate decisions to take, including changes to the project‟s objectives and methodology. An evaluation must be planned carefully. There is no one suite of techniques that fits all types of projects. The evaluation approach, design and methodologies should match the specific project. The focus and purpose of an evaluation differs depending on the needs of stakeholders that may include project developers, funding agencies, local government, community, teaching personnel and students. It is important to consult with stakeholders to select the most suitable approach. By identifying the highlights and lowlights of a project, evaluation leads to conclusions that may affect future decision making. Findings of evaluation reports, based on thorough analysis, are valuable input in planning processes. Evaluation supports learning and improvement through incorporation of recommendations into new projects, programs and strategies.

3.1.1 The Technical and Engineering Segment

The technical and engineering segment of project evaluation tries to evaluate the total technical and engineering soundness of a project. It also tries to relate the project to the environment in which it is located.
We will now proceed to draw up a checklist for the technical engineering segment of project evaluation.

3.1.2 The Management Segment

After evaluating the technical and engineering segments of projects, the next segment we need to discuss is the management segment.
The management segment focuses attention on the management aspects of a project. Projects only become successful if they are well managed. We do not need to over-stress the importance of management. Again, we need to evaluate the legal form of the organization that is evaluated and see if it can carry the project in question.

3.1.3 The Demand and Market Segment

The next segment we shall consider is the demand and market segment. This segment focuses attention on the demand for goods and services and relates it to the market. An evaluation of the demand for goods and services is very important because demand translates to revenues. Also, we need to evaluate supply situations in the market. These two topics will be treated in detail later. We will now examine a checklist for the demand and market segment.

SELF ASSESSMENT EXERCISE

List and explain five items that you hope to find in the checklist of the management segment of a project evaluation.

3.1.4 The Financial Segment

The financial segment of project evaluation focuses attention on the financial aspects of projects. In discussing financial issues, we are considering all financial aspects of a project such as start-up costs, financial plans, renames and costs and income statements.

3.1.5 The Economic Segment

The last segment we will consider is the economic segment. The economic segment considers projects from the macroeconomic point of view. Economic analysis tries to measure the benefits and costs of projects in terms of their value to society as a whole.

4.0 CONCLUSION

What we have achieved in this unit is to develop a format for conducting the evaluation of projects.

5.0 SUMMARY

We have discussed the format of project evaluation. We did identify the following as segments of project evaluation.

- The technical and engineering segment
- The management segment

• The demand and market segment
• The financial segment
• The economic segment

6.0 TUTOR-MARKED ASSIGNMENT
Discuss the key segments of project evaluation

7.0 REFERENCES/FURTHER READINGS
Leon Ikpe (1999). Project Analysis and Evaluation. Lagos: Impressed Publishers

UNIT 7: CAPACITY AND PRODUCTION PLANNING

CONTENTS

1.0 INTRODUCTION

In Unit 4, we discussed factors affecting location of projects. There we examined such factors as nearness to critical markets, nearness to sources of power and other factors. In this unit, we shall discuss capacity and production planning.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain capacity and production planning
- Strategies of Capacity Planning
- Definition of Capacity Planning
- Similarities between Capacity Planning & Aggregate Planning

3.0 MAIN CONTENT

3.1 Capacity and Production Planning

Capacity planning is the process of determining the production capacity needed by an organization to meet changing demands for its products. In the context of capacity planning, design capacity is the maximum amount of work that an organization is capable of completing in a given period. Effective capacity is the maximum amount of work that an organization is capable of completing in a given period due to constraints such as quality problems, delays, material handling, etc.

The phrase is also used in business computing and information technology as a synonym for capacity management. IT capacity planning involves estimating the storage, computer hardware, software and connection infrastructure resources required over some future period of time. A common concern of enterprises is whether the required resources are in place to handle an increase in users or number of interactions. Capacity management is concerned about adding central processing units (CPUs), memory and storage to a physical or virtual server. This has been the traditional and vertical way of scaling up web applications, however IT capacity planning has been developed with the goal of forecasting the requirements for this vertical scaling approach.

A discrepancy between the capacity of an organization and the demands of its customers results in inefficiency, either in under-utilized resources or unfulfilled customers. The goal of capacity planning is to minimize this discrepancy. Demand for an organization's capacity varies based on changes in production output, such as increasing or decreasing the production quantity of an existing product, or producing new products. Better utilization of existing capacity can be accomplished through improvements in overall equipment effectiveness (OEE). Capacity can be increased through introducing new techniques, equipment and materials, increasing the number of workers or machines, increasing the number of shifts, or acquiring additional production facilities.

Capacity is calculated as (number of machines or workers) × (number of shifts) × (utilization) × (efficiency).

Effectively planning your production to ensure that capacity and product demand match affects your company's profitability. When you predict how many products you will sell, plan for adequate capacity and develop production schedules that run without delays, you eliminate unnecessary costs. The key is to identify information sources yielding reliable data that allows you to predict accurately the levels of production and the scheduling you will need.

3.2 Strategies of Capacity Planning

The broad classes of capacity planning are lead strategy, lag strategy, match strategy, and adjustment strategy.

 Lead strategy is adding capacity in anticipation of an increase in demand. Lead strategy is an aggressive strategy with the goal of luring customers away from the company's competitors by improving the service level and reducing lead time. It is also a strategy aimed at reducing stock out costs. A large capacity does not necessarily imply high inventory levels, but it can imply higher cycle stock costs. Excess capacity can also be rented to other companies.

Advantage of lead strategy: First, it ensures that the organization has adequate capacity to meet all demand, even during periods of high growth. This is especially important when the availability of a product or service is crucial, as in the case of emergency care or hot new product. For many new products, being late to market can mean the difference between success and failure. Another advantage of a lead capacity strategy is that it can be used to preempt competitors who might be planning to expand their own capacity. Being the first in an area to open a large grocery or home improvement store gives a retailer a define edge. Finally many businesses find that overbuilding in anticipation of increased usage is cheaper and less disruptive than constantly making small increases in capacity. Of course, a lead capacity strategy can be very risky, particularly if demand is unpredictable or technology is evolving rapidly.

 Lag strategy refers to adding capacity only after the organization is running at full capacity or beyond due to increase in demand (North Carolina State University, 2006). This is a more conservative strategy and opposite of a lead capacity strategy. It decreases the risk of waste, but it may result in the loss of possible customers either by stock out or low service levels. Three clear advantages of this strategy are a reduced risk of overbuilding, greater productivity due to higher utilization levels, and the ability to put off large investments as long as possible. Organization that follow this strategy often provide mature, cost-sensitive products or services.

 Match strategy is adding capacity in small amounts in response to changing demand in the market. This is a more moderate strategy.

 Adjustment strategy is adding or reducing capacity in small or large amounts due to consumer's demand, or, due to major changes to product or system architecture.{Faizan Ameer}

3.3 Capacity Planning

In the context of systems engineering, capacity planning is used during system design and system performance monitoring.

Capacity planning is long-term decision that establishes a firm's overall level of resources. It extends over time horizon long enough to obtain resources. Capacity decisions affect the production lead time, customer responsiveness, operating cost and company ability to compete. Inadequate capacity planning can lead to the loss of the customer and business. Excess capacity can drain the company's resources and prevent investments into more lucrative ventures. The question of when capacity should be increased and by how much are the critical decisions. Failure to make these decisions correctly can be especially damaging to the overall performance when time delays are present in the system.

Capacity planning is focused on maximizing the capacity of a company in a way that allows it to be more efficient and, thus, more profitable. Basic capacity planning attempts to match the volume the company is able to produce to the demand in order to avoid downtime by preventing bottlenecks.

3.3.1 Capacity – available or required?

From a scheduling perspective it is very easy to determine how much capacity (or time) will be required to manufacture a quantity of parts. Simply multiply the standard cycle time by the number of parts and divide by the part or process OEE %.

If production is scheduled to produce 500 pieces of product A on a machine having a cycle time of 30 seconds and the OEE for the process is 85%, then the time to produce the parts would be calculated as follows:

(500 parts × 30 seconds) / 85% = 17647.1 seconds The OEE index makes it easy to determine whether we have ample capacity to run the required production. In this example 4.2 hours at standard versus 4.9 hours based on the OEE index.

By repeating this process for all the parts that run through a given machine, it is possible to determine the total capacity required to run production.

3.3.2 Capacity available

When considering new work for a piece of equipment or machinery, knowing how much capacity is available to run the work will eventually become part of the overall process. Typically, an annual forecast is used to determine how many hours per year are required. It is also possible that seasonal influences exist within the machine requirements, so a quarterly or even monthly capacity report may be required. To calculate the total capacity available, the volume is adjusted according to the

period being considered. The available capacity is difference between the required capacity and planned operating capacity.

3.4 Similarities between Capacity Planning & Aggregate Planning

Most business owners and managers strive to produce the highest quality products at the lowest production costs. In business terms, "capacity" means the maximum amount of productivity possible. Capacity planning is one means of managing resources to garner the most profit for every dollar spent. This type of planning can be set up at different levels. The planning system helps a company handle an increase or decrease in demand, meet changes in technology and take advantage of new opportunities.

3.4.1 Capacity Management and Planning

Capacity management involves setting up a system to fulfill all manufacturing orders on time. The system includes plans and schedules for production, taking into consideration materials needed and shipping requirements. Capacity planning is done for long-term, medium-term and short-term periods.

3.4.2 Aggregate Planning

Aggregate planning is medium-term capacity planning that typically covers a period of two to 18 months. Like capacity planning, aggregate planning considers the resources needed for production such as equipment, production space, time and labor. Companies use aggregate planning to ensure they have ample time to carry out production plans to meet customer demand, smooth operations along the supply chain and reduce production costs.

Aggregate planning, also called aggregate scheduling, is an approach to operations management focused on satisfying demand. This may be in relation to production, the workforce itself or inventory management. Aggregate planning ties facility planning in with scheduling decisions and does so in a way that is quantitative, meaning it produces numbers to back up an operations plan. Aggregate plans help match supply and demand while minimizing costs by applying upper-level forecasts to lower-level, production floor scheduling. Plans generally either chase demand, adjusting the workforce accordingly, or are level plans, meaning that labor is relatively constant with fluctuations in demand being met by inventories and back orders.

3.4.3 Aggregate Production Planning Strategies

Types of aggregate production planning strategies include the chase strategy, level strategy and a mixed strategy. In the chase strategy, the size of the workforce and production is modified as needed to meet demand throughout the planned period. In the level aggregate planning production strategy, production rates remain steady throughout the period. When a company implements a mixed strategy, inventory and workforce levels are adjusted when required to meet demand.

3.4.4 Other Types of Capacity Planning

In addition to aggregate planning, which deals with resource requirements, companies can also use capacity planning to determine future capacity needs at other levels. For example, capacity requirements planning takes into consideration the materials needed for production throughout the planned period. Another type of capacity planning -- rough-cut -- takes place at the master-scheduling level. Like aggregate planning, this planning strategy considers the time needed to complete production but is focused on short-term rather than medium-term planning.

3.5 Production Planning & Scheduling

The goal of production planning is simply to maintain flow. The individual in charge of production planning adjusts the workforce and process flow to obtain a regular use of company resources with minimal downtime, minimal bottlenecks and a level of output consistent with all the resources being put into the process.

Production planning, or production scheduling, is a term that covers all aspects of operations, from workforce activities to product delivery. Production planning is almost exclusively seen in manufacturing environments; however, many of the techniques employed in production planning can be and are used by many service-oriented businesses. Production planning is primarily concerned with the efficient use of resources. While it is sometimes referred to as operations planning, and it employs many of the same techniques, the primary distinguishing characteristic is that production planning is focused on the actual production, whereas operations planning looks at the operation as a whole.

3.5.1 Static Versus Dynamic Planning

There are two main types of production planning: static and dynamic. Static planning carries an assumption that all steps in a process can be defined and will not change. In contrast, dynamic planning assumes that steps in the process will change, so nothing is planned until the demand is received. Dynamic planning works very well in environments where there is a high degree of customization. An example of a static plan is a retail clothing company, in which production levels are determined up to a year in advance. An example of a dynamic plan is a floral shop; there may be a few arrangements for display and possible purchase, but the primary focus is on creation of custom arrangements after an order is received.

3.5.2 Forward Incremental Planning

Forward incremental planning, or FIP, is a dynamic planning method. FIP is implemented from the initial receipt of an order. The actions required to fulfill that order are prioritized. The essential goal of FIP is to reduce lag time. While it can be quite effective, its primary limitation is that it assumes no other action is in progress -- as in, no machines are tied up and the workforce was essentially idle until the order was

received. This may be a huge limitation for some industries, but for companies that produce products with high levels of customization, FIP is a powerful tool.

3.5.3 Backward Incremental Planning

Backward incremental planning, or BIP, is the other side of the FIP coin. BIP looks at the requirements from the due date backward and organizes the process accordingly. A good example of this is a bakery. The cake must be fresh for its pickup date, so the baker would look at the steps required to produce the cake and the estimated time required to bake and decorate it. BIP works well in cases where a deadline is more of a requested completion date and completing the order sooner produces no benefit.

3.6 The Importance of Planning & Scheduling

A smart company owner understands the importance of planning and scheduling. In fact, these two important business activities form the basis of almost all business operations on some level. Take the time to learn more about the importance of planning and scheduling for your small company.

Identification

Planning and scheduling are closely related; they're both processes that apply to almost every element of starting and running a business. For example, when you create a business plan and write down each section of how the business will run, you are participating in the planning process. You must also write a complete schedule to go along with that plan so that you know what to work on each day as you work toward the opening day of the business. For work projects, you must establish a project plan and well-defined goals, then set a corresponding schedule for accomplishing those goals.

Significance

There are a couple of important reasons why planning and scheduling are important for your business. For one, a solid plan and schedule helps keep costs down and allows you to operate according to a budget. For instance, if you take the time to create a plan for an online advertising campaign, you'll be able to narrow down your target audience and avoid the unnecessary cost of advertising to people who aren't interested in your products. Creating a schedule for running your online ads may also allow you to take advantage of price promotions offered by the advertising service. You can also set strict ad budget restrictions based on your plan. Having a plan and schedule also helps make your business goals seem more realistic and achievable.

Types

In addition to general planning and scheduling activities, many businesses must also prepare specific schedules and plans. For instance, a manufacturer must create an operations plan and schedule for the

production process. Companies that have to order supplies and raw materials on a regular basis need an ordering schedule. If the company utilizes shift workers, there must also be a schedule detailing the availabilities of employees and needs of the business.

Solutions

Creating a project plan and schedule is a two-step process that requires one or more computer programs. When planning, it's helpful to simply create a table with columns denoting every aspect of the project, including a description of the project that needs to be completed, a timeline for the project's completion including a due date, the name of the project leader, and the project's budget. You can create such a table in a word processing or spreadsheet program. After the initial plan is complete, enter a summary of specific tasks along with deadlines into a calendar program to receive reminders of upcoming deadlines. Such reminders are useful in remaining on-time with projects.

Expert Insight

One issue that may arise in the process of planning and scheduling is a situation where the business owner has to address multiple objectives at the same time. As Michael L. Pinedo, author of "Planning and Scheduling in Manufacturing and Services" states, "This implies that the two problems often cannot be solved separately; they may have to be solved together." For example, if one of your business objectives is to increase sales figures, an additional goal tied to that objective might be to train your sales professionals. These competing needs may complicate the process and cause delays in the project plan until both issues are addressed.

4.0 CONCLUSION

We have discussed capacity and production planning which are very important aspects of a project because they both relate the project to the market. Capacity and production plans enable the firm to plan well in advance what to produce and in what quantity too.

5.0 SUMMARY

We have discussed capacity and production planning and have established the link between them.

6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by the installed capacity of a plant?
2. Strategies of Capacity Planning
3. Definition of Capacity Planning
4. Similarities between Capacity Planning & Aggregate Planning

7.0 REFERENCES/FURTHER READINGS

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UNIT 8: PROJECT COST ANALYSIS
CONTENTS

1.0 INTRODUCTION

In Unit 4, we discussed competition and marketing plans. We saw how competition takes place in the market place. We also discussed components of marketing plans as prepared by project initiators. The marketing plan as we discussed is very important to both the project initiators and the evaluators.

In this unit, we shall discuss project cost analysis which is very important in this course.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what project cost analysis is
- discuss how the analysis can be prepared.

3.0 MAIN CONTENT

3.1 Project Cost Analysis

Project cost analysis provides total frameworks for calculating or estimating the total cost of a project. For example, a firm wants to set up a garri processing plant to enable it serve the food needs of a growing population. How does the firm know the cost of the envisaged garri processing plant?

To guide our discussions, let us define project cost as all those costs that are incurred in the process of setting up a project. The costs must be attached to the project. And the list of the items must be exhaustive. But we need to arrange the cost items in an orderly and consistent manner so that like items stay together. To ease our discussions and to make them as easy as possible, we shall divide project cost items into the following sub-headings:

- Cost of land
- Cost of building
- Cost of machinery and equipment
- Cost of utilities
- Cost of furniture and other fittings
- Cost of vehicles
- Pre-operational expenses
- Working capital

Although we have listed the cost sub-headings, we shall go ahead and prepare a small checklist that will guide us. After the checklist, we will work through a practical demonstration using a vegetable oil refining plant as an example.

4.0 CONCLUSION

Project cost analysis is an important aspect of our study of project evaluation. Project cost analysis is important to both the project initiator and the financial analyst who may want to evaluate a project.

5.0 SUMMARY

In this unit, we discussed project cost analysis. In doing this we agreed that cost of land, buildings, machinery and equipment, utilities, furniture and fittings, etc., all form part of the total project cost. We also used a check list to guide the preparation of the cost analysis. Finally we used a worked example of a vegetable oil refining plant to throw more light on the project cost analysis.

6.0 TUTOR-MARKED ASSIGNMENT

Why do you think that it is important to know the total cost of a project?

7.0 REFERENCES/FURTHER READINGS

Leon Ikpe (1999). Project Analysis and Evaluation. Lagos: Impressed Publishers.

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UNIT 9: PROJECT EVALUATION CRITERIA

CONTENTS

1.0 INTRODUCTION

Let us recall that the focus of this course is project evaluation. From unit 1, we discussed the project cycle. From there we moved on to discuss factors affecting location of projects. We also discussed capacity and production planning, demand analysis, supply analysis, project cost analysis, projected income statements, cash flows and the balance sheet.

All these have set the stage for us to tie the discussions. We now want to discuss a very crucial aspect of this course, which is the project evaluation criterion. Project evaluation criteria seek to present the methods to be adopted to measure the value of an investment project. The evaluation enables us to choose between two or more projects once the values are known. Any project evaluation criterion to be adopted should posses the following characteristics:

• It should provide a means to distinguish between acceptable and unacceptable projects.
• It should also be able to rank projects in order of their desirability.
• It should be a criterion that is applicable to any conceivable project.
• It should recognise that bigger cash flows are preferable to smaller ones.
• It should recognise that early cash flows or benefits are preferable to later cash flows or benefits.

Although there are a lot of project evaluation criteria in the literature, we shall discuss the most widely accepted criteria which are the traditional criteria and the discounted cash flow (DCF) criteria.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

• discuss project evaluation criteria
• distinguish between the traditional criteria and the discounted cash flow relative to project evaluation.

3.0 MAIN CONTENTS

3.1 Traditional Criteria of Project Evaluation

In the traditional criteria, we shall discuss two methods, namely: the payback period and the accounting rate of return method.

The Payback Period

The payback period is one of the most popular methods of project evaluation. The payback period is defined as the number of years required to recover the original cash outlay invested in a project. If the project yields constant annual cash inflows, the payback period can be computed by dividing cash outlay by the annual cash inflow. So we say thus:

Payback period Cash outlay (investment) = Annual Cash inflow

Example

A project requires a cash outlay of N200,000 and yields an annual cash inflow of N50,000 for a period of 10 years; calculate the payback period.

The payback period is $\frac{\text{N200, 000}}{\text{N50, 000}}$ **= 4 years.**

However, it is to be noted that in the case of unequal cash inflows, the payback period can be computed by adding up the cash inflows until the total is equal to the initial cash outlay. The payback period is greatly admired by project evaluators because it is very simple to understand. Another good virtue of the payback period is that it costs less than most of the other sophisticated methods.

However, despite its simplicity, the payback period may not be a desirable investment criterion. In the first place, it fails to recognise the cash flows that come in after the payback period. Again it fails to consider the pattern of cash inflows and that early cash inflows rather than later cash inflows. Despite its weakness, the payback period is very popular analogy. It tries to emphasizes early recovery of an investment. This means that it gives an insight into the cash inflows of the project.

The Accounting Rate of Return (ARR) Method

The accounting rate of return (ARR) is a method that uses accounting information to measure the profitability of an investment. The accounting rate of return (ARR) is computed by dividing average income after taxes by the average investment.

$$\text{ARR} = \frac{\text{Average Income}}{\text{Average Investment}}$$

Example

A project costs N100,000 and has a scrap value of N40,000. The stream of income before depreciation and taxes are N40,000, N50,000 and N60,000 for the first three years. The tax rate is 50% and depreciation is on straight line basis.

Calculate the accounting rate of return for the project.

Solution

	Year 1	Year 2	Year 3
	N	N	N
Earnings before depreciation and taxes	40,000	50,000	60,000
Depreciation	20,000	20,000	20,000
Net earnings before taxes	20,000	30,000	40,000
Taxes at 50%	10,000	15,000	20,000
Net earnings after taxes	10,000	15,000	20,000

Book value of investment

Beginning	100,000	80,000	60,000
Ending	80,000	60,000	40,000
Average	90,000	70,000	50,000

$$\text{Average earnings} = \frac{10{,}000+15{,}000+20{,}000}{3}$$

$$= \mathbf{15000}$$

$$\text{Average investment} = \frac{90{,}000 + 70000 + 50{,}000}{3}$$

$$= \mathbf{70000}$$

$$\text{Accounting rate of return} = \frac{15000}{70000}$$

$$= \mathbf{21.42\%}$$

As an accept or reject criterion, the ARR method will accept all those projects whose ARR is greater than the minimum rate established by management. If the ARR is lower than the minimum rate established by management, then the project should be rejected. The ARR method is very simple to understand and use. It can also be easily calculated using accounting information.

However, the ARR suffers from three main weaknesses. First it uses accounting profits not cash flows in appraising projects. Secondly ARR ignores the time value of money. The profits occurring in different periods are valued equally.
Thirdly, it does not allow the fact that profit can be reinvested to earn more profits.

3.2 Discounted Cash Flow (DCF) Methods
We have discussed two of the traditional methods used in the evaluation of projects. One is the payback period while the other is the accounting rate of return (ARR). Although two of them are simple to use and understand, they are not theoretically sound. Both of them fail to consider the timing of cash flows. Both fail to consider the time value of money.
Because of these limitations, we shall consider two superior investment criteria which fully recognise the timing of cash flows. The two methods are the net present value (NPV) method and the internal rate of return (IRR) method. These two methods are referred to as discounted cash flow (DCF) methods or the tme-adjusted methods.

The Net Present Value (NPV) Method
This method correctly recognises the fact that cash flows arising different time periods differ in value and are comparable only when their equivalent- present values are found out.
The following steps are followed when computing the net present value (NPV).
1. A discount rate is selected to discount the cash flows. The correct discount rate should be the firm‟s cost of capital which is the minimum rate of return expected by the investors to be earned by the firm.
2. The present value of cash inflows and outflows are computed using cost of capital as the discounting rate.
3. The net present value (NPV) is the present value of cash inflows less present value of cash outflows.
The acceptance rule using the NPV method is to accept a project if the NPV is positive, and to reject it if the NPV is negative.
If NPV is greater than zero, then the value of the firm is expected to increase. It is also important for us to understand the interpretation of NPV. The net present value may be interpreted to mean the immediate increase in the wealth of a firm if the investment proposal is accepted. It is equal to an unrealised capital gain. The net present value can also be interpreted to represent the amount the firm could raise at a required rate of return in addition to the initial cash outlay to distribute immediately to its shareholders and by the end of the project life to have paid off all the capital raised plus interest on it.

Example

Calculate the net present value of a project which cost N500,000. But generates cash inflows of N150,000, N300,000 and N400,000 over a three year period. The required rate of return is 10%.

Solution

Year	Cash inflows	Discount factor at 10%	Present Va of Cash Inf
	N		N
1	150,000	.909	136
2	300,000	.826	247
3	400,000	.751	300
Total			**684**
Less investment outlay			**500**
Net present value			**184**

In terms of merit, the NPV method is very significant since it recognizes the time value of money. It also is consistent with the objective of maximising the wealth of shareholders. However, the NPV suffers from the following limitations.

Firstly, it is fairly difficult to use.

Secondly, in computing the NPV, it is assumed that the discount rate which usually is a firm‟s cost of capital is known. But as we know, the cost of capital is a fairly difficult concept to measure in real life.

Thirdly, NPV may not yield a consistent answer when the projects being compared involve different amounts of investment.

The Internal Rate of Return (IRR) Method

The internal rate of return (IRR) can be defined as that rate which equates the present value of cash inflows with the present value of cash outflows of an investment. Put in another way, the internal rate of return is the rate at which the NPV of an investment is zero. It is called the internal rate because it depends solely on the outlay and the resulting cash inflows of the project and not any rate determined outside the investment.

Let C = Cash outlays of an investment

A1 = Cash inflows received in (I+R). year I discounted at the cost of capital R.

A2 = cash inflows received in year 2, $(I+R)^2$ discounted at the cost of Capital R.

A3 = cash inflows received in year 3, (I+R)3 discounted at the cost of Capital R.

Write the basic equation

$$C = \frac{A1}{(1+R)} + \frac{A2}{(1+R)^2} + \frac{A3}{(1+R)^3}$$

$$O = C - \frac{A_1}{(1+R)} + \frac{A_2}{(1+R)^2} + \frac{A_3}{(1+R)^3}$$

The value of R in the equation at which total cash outlays equal total cash inflows is called the internal rate of return (IRR). Usually the value of R can be found out by trial and error. Generally, if the calculated present value of the expected cash inflows is lower than the present value of cash outflows, a lower rate should be tried. On the other hand, if the calculated present value of the expected cash inflows is higher than the present value of cash outflows, a higher rate should be tried.

Example

A barbers‟ shop costs N32,400 to establish and is expected to generate cash inflows of N16,000,N14,000 and N12,000 over its life of three years. Calculate the internal rate of return.

Solution

Let us start by trying 16%

Year	Cash Inflow	Discount Factor at 16%	Present Value
	N		N
1	16,000	.862	13,792
2	14,000	.743	10,402
3	12,000	.641	7,692

The net present value is –N514 at 16% discount factor. Let us try a lower rate like 14%

You will observe from the above calculations that when we tried 16% discount rate, the NPV was negative at –N514, when we tried 14%discount rate, the NPV became positive at N498. Therefore, the internal rate of return we are looking for lies between 14% and 16%.

The basic accept-or-reject rule, using the IRR method, is to accept the project if its internal rate of return is higher than the firm‟s required rate of return. However, the project should be rejected if its internal rate of

return is lower than the firms cost of capital. It is important that we understand the interpretation of the internal rate of return (IRR).
The internal rate of return (IRR) represents the highest rate of interest a firm would be ready to pay on funds borrowed to finance the project without being financially worse-off, by repaying the loan principal plus accrued interest out of the cash inflows generated by the project.
We should also see the internal rate of return method as a very sound method. As we said, it is a discounted cash flow method and also it considers the time value of money. It is also compatible with the firm‟s desire to maximise the owners‟ wealth. However the IRR method is fairly difficult to understand and it involves complex computations.

Self Assessment Exercise
Distinguish between the traditional project evaluation methods and the discounted cash. Show criteria.

4.0 CONCLUSION
We have discussed project evaluation criteria which we said constitute a very crucial topic in this course. We discussed traditional criteria of project evaluation. Here we mentioned the payback period and the accounting rate of return (ARR). We also discussed discounted cash inflow criteria. Here we mentioned the net present value (NPV) method and the Internal Rate of Return (IRR).

5.0 SUMMARY
Project evaluation criteria provide us with the tools with which we can choose from various investment proposals using acceptable techniques. The evaluation criteria guide the project initiator and assist him/her to choose among alternative projects. Also banks use project evaluation criteria to decide whether or not to lend money for a project.

6.0 TUTOR-MARKED ASSIGNMENT
Why are the discounted cash flow (DCF) techniques better and more acceptable than the traditional methods of project evaluation?

7.0 REFERENCES/FURTHER READINGS
Leon Ikpe (1999). Project Analysis and Evaluation. Lagos: Impressed Publishers.

UNIT 10: RISK AND COST ANALYSIS: THE EVALUATION METHODS

CONTENTS

1.0 INTRODUCTION

The evaluation of on-going and completed projects is one of the basic responsibilities of the Planning and Development Division.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

• explain the meaning of Evaluation

• analyse the purpose of evaluation and classify difference types of project evaluation.

3.0 MAIN CONTENT

3.1 Purpose of Evaluation

The final phase in the project cycle is project evaluation. The analyst looks systematically at the elements of success and failure in the project experience to learn how to plan better for the future. The basic objective of such a study is to ascertain the real worth of a project or programme as far as possible. Broadly speaking, evaluation may be defined as "a process which attempts to determine as systematically and objectively as possible the relevance, effectiveness and impact of activities in the light of the objectives". It is, thus, a critical analysis of the factual achievements/results of a project, programme or policy vis-a-vis the intended objectives, underlying assumptions, strategy and resource commitment. In specific terms, it makes an attempt to assess objectively the following:-

(a) the relevance and validity of the objectives and design of the project/programme in terms of broader issues of development policy, sector/sub-sector priorities and strategies as well as other problems of a wider nature;

(b) the efficiency and adequacy of the pace of progress of the project/programme where the focus is mainly on managerial performance and productivity;

(c) the effectiveness of the project/programme - a major part of an evaluation exercise-in realizing the intended objectives from a variety of angles; and

(d) the identification of reasons for the satisfactory or unsatisfactory accomplishment of the results of the project/programme and to deduce critical issues and lessons which may be of relevance to other on-going and future projects/programmes of a similar nature.

3.2 Types of Evaluation

Evaluation can be applied for different purposes as well as to a specific activity, project or programme. It is not restricted to the completion stage only but involves periodic investigations at many stages. The different types of project evaluations carried out are: (i) ex-ante evaluation, (ii) on-going evaluation and (iii) terminal evaluation/ex-post evaluation. The ex-ante evaluation/pre-approval appraisal has already been discussed with methods and techniques in Chapter-5. The on-going evaluation is carried out by the organization of its own to re-assess the

projected feasibility of the PC-I content because of the time lag, while external evaluation is done by an agency other than the body involved in the implementation of a project. On-going and post-completion evaluations are discussed below:-

(a) On-going/Mid-term Evaluation

The main purpose of an on-going/mid-project evaluation is to assist the project management to make appropriate adjustments in the changed circumstances or to rectify any shortcomings in the original design, so as to improve its efficiency and overall performance.

(b) Post-Completion Evaluation

The purpose of an ex-post or post-hoc evaluation is to discover the actual, as opposed to the projected, results of implementing a project. The aim of evaluation is primarily to compare the actual outcome of the project with the projections made at the appraisal stage. The examination of different aspects of the project can provide important lessons derived from experience for the new projects. The overall impact of the project will result in a number of effects which can be classified as costs and benefits, direct and indirect or tangible and intangible. Ex-post evaluation takes place after the completion of the project and is often more in-depth as it focuses on the analysis of impact. Besides, it is time-consuming, costly and calls for persons with special skills.

SELF ASSESSMENT EXERCISE

Discuss the nature of evaluation of a project.

4.0 CONCLUSION

In this unit, we discussed the nature of economic analysis and compared it with the financial analysis of a project. We discussed net present benefit cost ratio and the internal rate of return (IRR).

5.0 SUMMARY

Introduction to meaning of evaluation, the purpose of evaluation and types of evaluation. society.

6.0 TUTOR-MARKED ASSIGNMENT

Write short note on midterm evaluation and post-completion evaluation?

7.0 REFERENCES/FURTHER READINGS

Leon Ikpe (1999). Project Analysis and Evaluation. Lagos: Impressed Publishers. 140

MODULE 3: QUANTITATIVE ASPECTS OF DATA AND PLANNING

UNIT 11: DATA PLANNING AND POLICY MAKING

UNIT 12: THE DEVELOPMENT PLANNING PROCESS: SOME BASIC MODELS

UNIT 11: DATA PLANNING AND POLICY MAKING

CONTENTS

1.0 INTRODUCTION

There is a saying that 'if you fail to plan, you will be planning to fail'. This is similar to the idiom that says 'look before you leap'. The wisdom in both sayings is that you are more likely to succeed than fail in an activity when you make and implement plans for it. This is particularly true when the activity require outlays of money, time and effort, and

when failure can be very costly. So is data organization and management.

Data management activities are usually performed by information systems, and that the activities usually demand the use of resources such as data, people, equipment, energy and time. Of course, the more data and information that are created or acquired by a system for processing, storage, output and communication, the more resources that will be required. But resources are not free, and some resources, such as time, are fixed. Accordingly, various procedures, policies and plans may be established by different information systems to guide and regulate the processes of data creation, management and use.

In this unit you will learn about some of these guidelines and policies. You will learn about the nature of policies that organizations and information systems often establish to guide their data management activities. You will also learn about the importance of making and implementing rules, plans and policies for data organization and management.

2.0 OBJECTIVES

After studying this unit, you should be able to:

1. Explain the role of data planning in the process of data management.
2. Describe aims of information resources management.
3. Discuss the importance of data and information policies in data management.
4. Describe the types of information that data policy manuals usually contain.

3.0 Main Content

3.1 Planning for data

The planning of any human activity invariably aims to answer, before the commencement of the activity, the following five basic questions:

- Why should the activity be done?
- Where should the activity be done?
- When should the activity be done?
- What tasks must be done in the activity?
- Who should do which tasks in the activity?

Planning involves obtaining prior information to enable the planner to answer each of the above questions.

Data management activities consume valuable resources, and hence, must be planned effectively to ensure success and avoid mistakes and wastage. In other words, planning for data management requires that one finds prior answers to such questions as:

- What information should be produced for various people who need information in an organization or information system, and why?

- What data should be collected, stored, analyzed, communicated, etc., toward producing the required information?
- How should the data be collected, stored, analyzed, communicated, etc? When should the data be collected, stored, analyzed, communicated, etc? Who should be responsible for the different activities in the data management cycle?

SELF-ASSESSMENT EXERCISES

(a) Answer the following questions: Do you:

(i) Always keep letters and greetings cards that you receive from friends?

(ii) Keep copies of letters that you hand write?

(iii) Keep copies of official letters that you write?

(iv) Keep your books always well arranged on your table shelves?

(v) Always carefully read over your answers in an examination?

(vi) Frequently change methods you use for obtaining information?

(vii) You use radio/TV to obtain information more than newspapers?

(viii) Share information with friends immediately you get it?

(ix) Often try to confirm the accuracy of any information that you receive from: Your friends? Your parents? Your teachers? Newspaper?

(x) Arrange the following potential sources of data and information in the decreasing order in which you prefer to use them: books, newspapers, teachers, internet, personal notebooks of your course mates, radio, TV, parents, etc

(b) Use your answers in (a) to explain your own personal policies toward data and information in your life.

3.2 Information resource management

Data management processes are often intertwined with those concerned with information management. The reason is that data are the vehicles through which people convey information, and through which people obtain information.

Information is nowadays, recognized as a vital resource that can be used and re-used to improve the knowledge of individuals and organizations. Hence, information is now regarded as a resource, just like natural, human and financial resources had been for a long time.

The recognition of information as a vital resource has given rise to a branch of management known as information resource management (IRM). The basic idea of IRM is that information resources should be properly and carefully managed by competent information professionals, just as finance has been managed by accountants for many years. The main ideas championed by IRM professionals are:

- That information resources include information and data, as well as the technologies for creating, acquiring, storing, processing and communicating data, and for producing and using information.

- That information and data are very valuable because they cost money to acquire, process and use, and because they can be used to improve the value of human, financial, natural and knowledge resources.
- Those managerial principles must be devised for managing information resources. Hence, all data, information and knowledge management activities must be carefully planned, performed and evaluated to minimize their cost and to maximize their benefits to organizations and information systems.
- That information resources must be managed by qualified information professionals. In other words, qualified information professionals and knowledgeable people should plan and manage information resources.

The basic argument of people who champion information resources management is that organizations and information system will be better able to develop and manage their information and data resources when they accept and apply the above principles. Do you believe them?

3.3 Data and information policies

A policy is a set of statements that describe the circumstances, objectives and constraints to be followed by people in an organization or information system concerning a particular activity or issue.

You would remember, for instance, some policies of the primary school that you attended some years ago. You would recall that there were rules or policies regarding punctuality and lateness at school, regarding the behaviour expected of pupils, regarding punishment for various offence, regarding the roles of teachers, parents, etc. You would recall also that some of these school rules were written and pasted on notice boards, and that many others are not written but were nevertheless known and respected by pupils, teachers and parents. In a similar way, data management policies are usually formulated by organizations and information systems to explain why and how the various data management activities should be performed.

Data policies are usually formulated to ensure that only potentially useful data are created or acquired for processing and management by an organization or information system. Potentially useful data are those from which more useful data or information can be produced.

3.4 Example: Data policy issues in data collection

Appropriate data policies can be formulated to guide each of the activities in a data management cycle that was first introduced in Unit 2. May be you should review Unit 2 now to refresh your memory.

Here we will illustrate the basic objective of data policies by looking at the issues that are usually addressed by data policies for one of the data management activities - data collection and acquisition. Data collection and acquisition activities are performed by information systems to

obtain data for subsequent storage, communication and processing to produce information.

Data policies for data collection and acquisition will often provide guidelines and other helpful information that can be used by people in organizations and information systems for answering the following questions:

Why should certain types of data be collected, acquired or created?

(a) The usual reason for collecting or acquiring data of any kind is in order to enable subsequent processing and interpretation of the data to produce information and other more valuable data required by people (referred to as information users) within and outside an organization or information system. Users need information either to improve their knowledge, make decisions or solve problems. In other words, the types of information that users would require usually depend on such things as the types of subjects they are studying, the type of work they do, the issues they have to decide on, and the problems they have to solve, and sometimes, the types of leisure activities they engage in.

(b) What specific types of data should the organization or information system collect, acquire or create?

The data policy would explain data to be collected, should be collected or created only on specific groups of people, certain types of organizations, or certain subjects, activities, events, places, etc. The policy might also require that the data to be collected or acquired should meet certain minimum standards of accuracy, detail, timeliness, etc. As noted above, the policy would justify the specific types of data to be collected or acquired on the basis of the information that will be produced from the data for users by the organization or information system.

(c) What symbols should be used to create data, and/or in what format and from what media should data be collected or acquired?

As explained in Module 1, data can be created or acquired in numeric, textual, graphical, pictorial and sound symbols and formats. For example, an event can be described in words, or recorded in a video tape, an audio tape, or in a series of photographs. The data policy will seek to provide guidelines as to which formats should be used for acquiring or creating data for the organization or information system. The reason is that each of the different formats in which data can be created or acquired requires different technologies and equipment.

(d) From what sources should data be collected or acquired?

Data can be collected from various sources. Data can be collected from people in a questionnaire survey, or by means of forms which certain people might be required to fill when they request for or purchase goods or services. Such data are referred to as primary data. However data can also be extracted from books, magazines, newspapers, computers and the Internet. Such data are referred to as secondary data. Data might also be collected from within and outside an organization or information

system. These are internal and external data respectively. The data policy will seek to explain the types of data and information sources that should be emphasized by the organization or system.

(e) When and how frequently should data be acquired, collected or created?

A data policy will sometimes explain how frequently certain data should be collected - whether hourly, daily, weekly, monthly, annually, etc. The policy may also specify when certain data should be collected. For instance, candidates in an examination are often required to fill attendance forms at the start of the examination and not after the examination. Can you guess the reason for this?

What should be the functions or responsibility of different organizational units in the data capture, acquisition and creation processes?

Data collection is usually performed by different organizational units or systems components. For example, at the start of an academic year or semester, students are usually required by their schools and colleges to fill forms indicating what courses they desire to take in their respective departments, and are at the same time also required to fill forms and pay tuition and other fees in the accounts department. They may also be required to fill forms in order to check into hostels of residence. Hence, data policies often specify the responsibilities of the different organizational units and personnel in respect of various data collection activities.

The above questions and the explanations provided underneath them focus only on data collection and acquisition activities. Of course, similar questions and explanations can be given in respect of each of the other data management activities. You should at this point write out questions similar to those above for at least one of the other data management activities such as: data analysis and summarization, data storage and retrieval, data protection and archiving, data communication and transfer, etc.

SELF-ASSESSMENT EXERCISES

Write out sample data protection and archiving questions that a data management policy might provide to assist people in an organization or system to answer.

[Hint: Try to replace the words 'acquisition', 'collection' and. ‘creation' with "protection' and "archiving" in the questions provided in the text.]

3.5 Data policy manuals

A data policy is a basic guide to action that sets the boundaries within which data management activities are to take place. Most organizations and information systems establish general principles to regulate their data and information activities. A policy may be written or unwritten.

The advantage of a written policy is that it can easily be referred to in case of disagreement about appropriate and inappropriate activities.
A written policy is usually referred to as a policy manual. The following are some of the advantages of policy manuals. Policy manuals
- Provide plans of action in respect of most data management issues, activities, events and problems;
- Forces people within an organization or information system to think carefully through whatever they want to do with data;
- Enable people within an information system to perform their respective data management functions and tasks in a standardized, consistent manner;
- Often establish data quality control points which often help to ensure data quality; help to preserve ways of doing things, even though employees may change;
- Can be used as material for training and job orientation of new employees;
- Serve as a starting point for thinking about how to improve on how data management activities can be improved within an organization and information system.
Sample statements that a written data management policy manual might contain can be expressed as follow:
1. This data policy should be used as a guide in all departments of this organization for determining the data to be acquired, collected or created.
2. Data to' be collected should also be determined 'through, periodic surveys of the actual and potential information needs of middle and top, level managers. Such surveys should be conducted every five years.
3. As far as practicable, data should be immediately captured unto appropriate storage media at the point' where they are being created.
4. Employees who are responsible for data creation, capture and acquisition should periodically be trained on their responsibilities in ensuring that data meet the minimum standards of accuracy.
5. This data acquisition, collection and creation policy should be reviewed every three years.

3.6 Data planning and policy-making requirements

Effective data planning and policy-making in an organization or information system demands that people in the organization or information system
(a) Accept the importance of data, information and knowledge activities, and the necessity to properly manage the activities;
(b) Establish specific policies to guide and regulate various data management activities within the organization or information system;
(c) Use the policies as guide for determining what data to collect acquire or create; for determining what data management activities to perform, and for creating information systems to perform those activities.

(d) Evaluate either continuously or periodically whether the established policies are being followed, and if not, ensuring that they are followed.

4.0 CONCLUSION

Data planning and policy making should always be considered as the starting point of all data management activities. This is the reason for explaining data planning and policy-making very early in this course, and ahead of other activities in the data management cycle. Data cost money and other resources to collect, store, protect, communicate and process, and there is no point in spending scarce resources on useless data.

5.0 SUMMARY

In this unit, you have learned about some important aspects of data planning and policy-making. Data planning involves answering questions about why data of different kinds should be collected, stored, processed or communicated to produce information. It also involve answering questions about what data management activities should be performed, how and when the activities should be done, and who should do them.

Data planning and management is interwoven with information management because of the very close relationship between data and information. The increasing necessity for organizations and information systems to acquire and manage data and information efficiently has given rise to a branch of management known as information resource management (IRM). The basic idea of IRM is that information resources are as valuable as money, and hence should be properly and carefully managed by competent information professionals, just as financial resources have been managed by accountants for years.

A data policy is a set of statements that describe the circumstances, objectives and constraints to be followed by people in an organization or information system concerning data management activities. Data policies are usually formulated to ensure that only potentially useful data are created or acquired for processing by an organization or information system. Data policies may be written or unwritten. However, written policies serve as a reference document for ensuring that people in organizations and information systems use standard and consistent rules and methods for performing data management activities.

SELF-ASSESSMENT EXERCISES

I. Explain the principles of information resource management.

2. In what ways does a data policy manual help an information system to properly manage data?

6.0 TUTOR-MARKED ASSIGNMENT

Select any data management activity (e.g. data collection, data storage) and explain why data planning be performed before performing the activity.

7.0 REFERENCES/FURTHER READINGS

McGarry, K. (1993). The changing nature of information: an introductory analysis. 2nd. ed., London: Library Association.

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UNIT 12: THE DEVELOPMENT PLANNING PROCESS: SOME BASIC MODELS

CONTENTS

1.0 INTRODUCTION

Most development plans have traditionally been based initially on some more or less formalized macroeconomic model. Such economy-wide planning models can be divided into two basic categories:

(1) aggregate growth models, involving macroeconomic estimates of planned or required changes in principal economic variables, and

(2) multisector input-output, social accounting, and computable general equilibrium (CGE) models, which ascertain (among other things) the production, resource, employment, and foreign-exchange implications of a given set of final demand targets within an internally consistent framework of interindustry product flows.

(3) Finally, probably the most important component of plan formulation is the detailed selection of specific investment projects within each sector through the technique of project appraisal and social cost-benefit analysis.

2.0 OBJECTIVES

The main goal of this unit is to identify the three "stages" of planning—aggregate, sectoral, and project—provide the main intellectual tools of the planning authority. All of these tools have been, and still are, extensively used by the World Bank and other development agencies, as well as developing country governments. We now turn to examine each of these stages and their associated models.

3.0 MAIN CONTENTS

3.1 Aggregate Growth Models: Projecting Macro Variables

The first and most elementary planning model used in almost every developing country is the **aggregate growth model**. It deals with the entire economy in terms of a limited set of macroeconomic variables deemed most critical to the determination of levels and growth rates of national output: savings, investment, capital stocks, exports, imports, foreign assistance, and so on. Aggregate growth models provide a convenient method for forecasting output (and perhaps also employment) growth over a three- to five-year period. Almost all such models represent some variant of the basic Harrod-Domar (or AK) model.

Given targeted GDP growth rates and a national capital-output ratio, the Harrod-Domar model is used to specify the amount of domestic saving necessary to generate such growth. Typically, this necessary amount of domestic saving is not likely to be realized on the basis of existing savings functions, and so the basic policy problem of how to generate additional domestic savings or foreign assistance comes into play. For planning purposes, the Harrod-

Domar model has been typically formulated along the following lines. We start with the assumption that the ratio of total output to reproducible capital is constant so that

$$K(t) = cY(t) \quad (3.1)$$

where $K(t)$ is capital stock at time t, $Y(t)$ is total output (GDP) at time t, and c is the average (equal to the marginal) capital-output ratio. We assume next that a constant share (s) of output (Y) is always saved (S) so that

$$I(t) = K(t+1) - K(t) + dK(t) = sY = S(t) \quad (3.2)$$

where I(t) is gross investment at the time t and d is the fraction of the capital stock depreciated in each period. Now if g is the targeted rate of growth of output such that

$$g = \frac{Y(t+1) - Y(t)}{Y(t)} = \frac{\Delta Y(t)}{Y(t)} \quad (3.3)$$

then capital must be growing at the same rate, because from Equation 3.1 we know that

$$\frac{\Delta K(t)}{K} = \frac{c\,\Delta Y}{K} = \frac{(k/y)\,\Delta Y}{K} = \frac{\Delta Y}{Y} \quad (3.4)$$

Using Equation 3.2, we therefore arrive once again at the basic Harrod-Domar growth formula (with the capital depreciation parameter):

$$g = \frac{sY - dK}{K} = \frac{s}{c} - d \quad (3.5)$$

Finally, because output growth can also be expressed as the sum of labor force growth (n) and the rate of growth of labor productivity (p), Equation 3.5 can be rewritten for planning purposes as

$$n + p = \frac{s}{c} - d \quad (3.6)$$

Of course, much development policymaking does not take productivity as exogenous but is actively focused on raising it. But given an expected rate of labor force and productivity growth (labor force growth can be calculated from readily available demographic information, and productivity growth estimates are usually based either on extrapolations of past trends or on an assumed constant rate of increase), Equation 3.6 can then be used to estimate whether domestic savings will be sufficient to provide an adequate number of new employment opportunities to a growing labor force. One way of doing this is to disaggregate the overall savings function ($S = sY$) into at least two component sources of saving, normally, the propensity to save out of wage income, W, and profit income, d . Thus, we define

$$W + \pi = Y \quad (3.7)$$

and

$$S\pi\Pi + SwW = I \quad (3.8)$$

Where $S\pi$ and Sw are the savings propensities from Π and W, respectively. By manipulating Equation 3.5 and substituting Equations 3.7 and 3.8 into it, we arrive at a modified Harrod-Domar growth equation:

$$c(g + d) = (S\pi - Sw)\left(\frac{\pi}{Y}\right) + Sw \quad (3.9)$$

which can then serve as a formula for ascertaining the adequacy of current saving out of profit and wage income. For example, if a 4% growth rate is desired and if $d = 0.03$, $c = 3.0$, and
$\underline{\pi} = 0.5$, Equation 3.9 reduces to $0.42 = S\pi - Sw$
Y

If savings out of capital income amount to 25%, wage earners must save at a 17% rate to achieve the targeted rate of growth. In the absence of such a savings rate out of labor income, the government could pursue a variety of policies to raise domestic saving or seek foreign assistance.
In countries where inadequate foreign-exchange reserves are believed to be the principal constraint on economic growth, the aggregate growth model typically employed is some variant of the two-gap model. Two-gap models are simply Harrod- Domar models generalized to take foreign-trade problems into account. In either case, aggregate growth models can provide only a rough first approximation of the general directions an economy might take. Thus, they rarely constitute the operational development plan. Perhaps more important, the simplicity and relatively low data collection cost of using aggregate growth models can often blind us to their very real limitations, especially when carried out in too mechanical a fashion. Average capital-output ratios are notoriously difficult to estimate and may bear little relation to marginal capital-output ratios, which are the relevant ratios for forecasting purposes, and savings rates can be highly unstable. The operational plan requires a more disaggregated multisector model of economic activity like the well-known input-output approach.

3.2 Multisector Models and Sectoral Projections

A much more sophisticated approach to development planning is to use some variant of the **interindustry** or **input-output model**, in which the activities of the major industrial sectors of the economy are interrelated by means of a set of simultaneous algebraic equations expressing the specific production processes or technologies of each industry. All industries are viewed both as producers of outputs and users of inputs from other industries. For example, the agricultural sector is both a producer of output (e.g., wheat) and a user of inputs from, say, the manufacturing sector (e.g., machinery, fertilizer). Thus, direct and indirect repercussions of planned changes in the demand for the products of any one industry on output, employment, and imports of all other industries can be traced throughout the entire economy in an intricate web of economic interdependence. Given the planned output targets for each sector of the economy, the inter industry model can be used to determine intermediate material, import, labor, and capital requirements with the result that a comprehensive economic plan with mutually consistent production levels and resource requirements can, in theory, be constructed.

Inter industry models range from simple input-output models, usually consisting of 10 to 30 sectors in the developing economies and 30 to 400 sectors in advanced economies, to more complicated linear programming or activity analysis models where checks of feasibility (what is possible given certain resource constraints) and optimality (what is best among different alternatives) are also built into the model. But the distinguishing characteristic of the inter industry or input-output approach is the attempt to formulate an internally consistent, comprehensive development plan for the entire economy.

Input-output analysis is often extended in two ways. First, by including data on factor payments, sources of household income, and the pattern of household goods consumption across various social groups (such as urban and rural households), a social accounting matrix (SAM) is created. This is accomplished by adding data from the system of national accounts, balance of payments, and flow-of-funds databases, often supplemented with household survey data, to the basic input-output table. A SAM therefore provides a comprehensive and detailed quantitative description of the interrelationships in an economy as they exist at a point in time, making it well suited as a tool for evaluating the impact of alternative development policies. SAMs for many countries can be found online. SAMs are often further elaborated with CGE models, which assume that households maximize utility and firms maximize profits. Utility (or demand) and production functions are assumed or estimated from national data. The resulting impact of the policy is then simulated using standard computer programs. The CGE approach is more complicated than a SAM, but its value lies in enabling policymakers to take into account the possible reactions of consumers and firms to the alternative policies being considered rather than assume that they will behave the way they did before the new policies were implemented.

3.3 Project Appraisal and Social Cost-Benefit Analysis

The vast majority of day-to-day operational decisions with regard to the allocation of limited public investment funds are based on a microeconomic technique of analysis known as **project appraisal**. The intellectual as well as the operational linkage among the three major planning techniques, however, should not be overlooked. Macro growth models set the broad strategy, input-output analysis ensures an internally consistent set of sectoral targets, and project appraisal is designed to ensure the efficient planning of individual projects within each sector.

3.3.1 Basic Concepts and Methodology: The methodology of project appraisal rests on the theory and practice of social **cost-benefit analysis**, which is also used in the United States and other developed countries. The basic idea of cost-benefit analysis is simple: To decide on the worth of projects involving public expenditure (or, indeed, in which public

policy can play a crucial role), it is necessary to weigh the advantages (benefits) and the disadvantages (costs) to society as a whole. The need for social cost-benefit analysis arises because the normal yardstick of commercial profitability that guides the investment decisions of private investors may not be an appropriate guide for public-investment decisions.

Private investors are interested in maximizing private profits and therefore normally take into account only the variables that affect net profit: receipts and expenditures. Both receipts and expenditures are valued at prevailing market prices for inputs and outputs.

The point of departure for social cost-benefit analysis is that it does not accept that actual receipts are a true measure of social benefits or that actual expenditures are a true measure of social costs. Not only will actual market prices often diverge from their true value, but also private investors do not take into account the external effects of their decisions. These externalities can be sizable and pervasive. In other words, where social costs and benefits diverge from private costs and benefits, investment decisions based entirely on the criterion of commercial profitability may lead to wrong decisions from the point of view of social welfare, which should be the government's primary concern. Although social valuations may differ significantly from private valuations, the practice of cost-benefit analysis is based on the assumption that these divergences can be adjusted for by public policy so that the difference between social benefit and cost will properly reflect social profitability, just as the difference between actual receipts and expenditures measures the private profitability of an investment.

Thus, we can define **social profit** in any period as the difference between social benefits and social costs where these are measured both directly (the real costs of inputs and the real value of outputs) and indirectly (e.g., employment effects, distributional effects). The calculation of the social profitability of an investment is then a three-step process.

1. We must first specify the objective function to be maximized—ordinarily, net social benefit—with some measure of how different benefits (e.g., per capita consumption, income distribution) are to be calculated and what the trade-off between them might be.
2. To arrive at calculations of net social benefit, we need social measures of the unit values of all project inputs and outputs. Such social measures are often called **accounting prices** or **shadow prices** of inputs and outputs to distinguish them from actual **market prices**. In general, the greater the divergence is between shadow and market prices, the greater the need for social cost-benefit analysis in arriving at public investment decision rules.
3. Finally, we need some decision criterion to reduce the stream of projected social benefit and cost flows to an index, the value of which

can then be used to select or reject a project or to rank it relative to alternative projects.

Let us briefly examine each of these steps of project appraisal.

3.3.2 Setting Objectives: Given the difficulty of attaching numerical values to such objectives as national cohesion, self-reliance, political stability, modernization, and quality of life, economic planners typically measure the social worth of a project in terms of the degree to which it contributes to the net flow of future goods and services in the economy—that is, by its impact on future levels of consumption.

Recently, a second major criterion, the project's impact on income distribution, has received increased attention. If preference is to be given to raising the consumption standards of low-income groups, the social worth of a project must be calculated as a weighted sum of the distribution of its benefits, where additional consumption by low-income groups may receive a disproportionately high weight in the social welfare objective function. Beginning in 1991, project analysis at the World Bank also included an environmental impact evaluation as a third criterion, along with future consumption and income distribution.

3.3.3 Computing Shadow Prices and Social Discount Rates:: The core of social cost-benefit analysis is the calculation or estimation of the prices to be used in determining the true value of benefits and the real magnitude of costs. There are many reasons for believing that in developing countries, market prices of outputs and inputs do not give a true reflection of social benefits and costs. Five such reasons, in particular, are often cited.

1. *Inflation and currency overvaluation.* Many developing countries are still beset by inflation and varying degrees of price controls. Controlled prices do not typically reflect the real opportunity cost to society of producing these goods and services. Moreover, in many countries, the government manages the price of foreign exchange. With inflation and unaltered foreign exchange rates, the domestic currency becomes overvalued, with the result that import prices underestimate the real cost to the country of purchasing foreign products and export prices (in local currency) understate the real benefit accruing to the country from a given volume of exports. Bubbles and crises can also lead to larger distortions. Public investment decisions based on this price will therefore tend to be biased against export industries and to favor import substitutions. The reverse holds with systematically undervalued exchange rates.

2. *Wage rates, capital costs, and unemployment.* Almost all developing countries exhibit factor price distortions resulting in modern-sector wage rates exceeding the social opportunity cost (or shadow price) of labor and interest rates understating the social opportunity cost of capital. This leads to widespread unemployment and underemployment and the excessive capital intensity of industrial production technologies.

If governments were to use unadjusted market prices for labor and capital in calculating the costs of alternative public investment projects, they would underestimate the real costs of capital-intensive projects and tend to promote these at the expense of the socially less costly labor-intensive projects that would be more favorable to the poor.

3. *Tariffs, quotas, subsidies, and import substitution.* The existence of high tariffs, in combination with import quotas and overvalued exchange rates, discriminates against the agricultural export sector and favors the import substituting manufacturing sector. It also encourages socially wasteful **rent seeking** on the part of competing exporters and importers. They vie with each other (often through bribes and threats as well as direct lobbying efforts) to capture the extra profits that can accrue to traders with import licenses, export subsidies, tariff protection, and industrial preferences.

4. *Savings deficiency.* Given the substantial pressures for providing higher immediate consumption levels to the masses of poor people, the level and rate of domestic savings in most developing countries is often thought to be suboptimal. According to this argument, governments should use a discount rate that is lower than the market rate of interest in order to promote projects that have a longer payoff period and generate a higher stream of investible surpluses in the future.

5. *The social rate of discount.* In our discussion of the shadow price of savings, we mentioned the need for governments to choose appropriate discount rates in calculating the worth of project benefits and costs that occur over time. The **social rate of discount** (also sometimes referred to as *social time preference*) is essentially a price of time—the rate used to calculate the **net present value** of a time stream of project benefits and costs, where the net present value (NPV) is calculated as:

$$\text{NPV} = \Sigma t \frac{Bt - Ct}{(1+r)t} \qquad (3.10)$$

where *Bt* is the expected benefit of the project at time *t*, *Ct* is the expected cost (both evaluated using shadow prices), and *r* is the government's social rate of discount. Social discount rates may differ from market rates of interest (normally used by private investors to calculate the profitability of investments), depending on the subjective evaluation placed on future net benefits: The higher the future benefits and costs are valued in the government's planning program—for example, if government also represents future, unborn citizens—the lower the social rate of discount will be.

In view of these five forces leading to considerable product, factor, and money price distortions, as well as considerations of external economies and diseconomies of production and consumption (by definition, factors not taken into account in private-investment decisions), it has been widely argued and generally agreed that a strong case can be made for concluding that a project's actual anticipated receipts and expenditures

often do *not* provide an accurate measure of its social worth. It is primarily for this reason that the tools of social cost-benefit analysis for project appraisal are essential to an efficient process of project selection in developing countries.

4.0 CONCLUSION

The process of formulating a comprehensive, detailed development plan is obviously a more complicated process than that described by our three-stage approach. It involves a constant dialogue and feedback mechanism between national leaders who set priorities and planners, statisticians, research workers, and departmental or ministry officials. Internal rivalries and conflicting objectives (not to mention political pressure from powerful vested-interest groups) are always to be reckoned with. Nevertheless, our presentation should at least serve to provide a feel for the mechanics of planning and to demonstrate the ways in which aggregate, input-output, and project planning models have been used to attempt to formulate an internally consistent and comprehensive development plan.

5.0 SUMMARY

:Having computed relevant shadow prices, projected a time stream of expected benefits and costs (including indirect or external effects), and selected an appropriate social discount rate, planners are in a position to choose from a set of alternative investment projects those thought to be most desirable. They therefore need to adopt a decision criterion to be followed. Normally, economists advocate using the NPV rule in choosing investment projects; that is, projects should be accepted or rejected according to whether their NPV is positive or negative. As noted, however, NPV calculations are very sensitive to the choice of a social discount rate. An alternative approach is to calculate the discount rate that gives the project an NPV of zero; compare this **internal rate of return** with either a predetermined social discount rate or, with less justification, an estimate of either the marginal product of capital in the economy or the market rate of interest; and choose projects whose internal rates exceed the predetermined or market rate. This approach is widely used in evaluating educational investments.

Because most developing countries face substantial capital constraints, the choice of investment projects will normally also involve a ranking of all projects that meet the NPV rule. Projects are ranked by descending net present value (more precisely, by their benefit-cost ratios, which are arrived at by dividing NPV by the constraint on total capital cost, *K*—that is, an NPV/*K* ratio is calculated for each project). The project or set of projects (some investments should be considered as a package of projects) with the highest NPV/*K* ratio is chosen first, then the next highest, and so on down the line until all available capital investment funds have been exhausted.

6.0 TUTOR-MARKED ASSIGNMENT

(1) Compare and contrast the three basic types of planning models: aggregate growth models,
input-output analysis, and project appraisal.

(2) What do you think are some of the strengths and weaknesses of these models from the standpoint of planning in developing nations?

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MODULE 4 FINANCE AND MANPOWER PLANNING

UNIT 13: INTRODUCTION TO ECONOMIC ANALYSIS

UNIT 14: MANPOWER PLANNING AND EVALUATION

UNIT 15: MARKET ANALYSIS

UNIT 13: INTRODUCTION TO ECONOMIC ANALYSIS

CONTENTS

6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

Generally, in a project analysis situation, most analyses focus on the cash inflows and outflows of a project. Critical expenses and incomes are usually compared to determine whether a project should be undertaken or not. But expenses and revenues in most financial analyses are mainly the consideration of a private investor.

The implication of financial analysis is that it provides a micro view of a project and concentrates attention on things like accounting profits.

Economic analysis on the other hand considers projects from a macro point of view. The type of questions asked in an economic analysis are:

1. Will the project under consideration lead to the general well being of the community, the state and the nation?
2. Will the project generate employment at various levels in the macro environment?
3. Will the project lead to economic growth?
4. What are the linkages that the project has, i.e., forward or backward linkages?
5. Will the project generate more technical knowledge?

The questions that we have asked are not exhaustive but only go to demonstrate the type of questions that economic analyses seek to answer.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the meaning of an economic analysis
- distinguish between an economic analysis and a financial analysis.

3.0 MAIN CONTENTS

3.1 Financial Analysis and Economic Analysis – a Comparison

In general theory, a financial analysis tries to solve resource allocation problems. It tries to use information from projects to determine whether projects should come on stream or not. Economic analysis also tries to solve resource allocation problems in an economy. In economic theory, resources are very scarce and it is part of any good analysis to allocate resources between competing projects. For example, resource allocation problems can arise if a community is trying to decide whether to build a school or a hospital with limited scare resources.

Financial analysis equally tries to allocate resources but from a micro view point. So, both financial and economic analyses solve resource allocation problems.

Financial analysis tries to concern itself with issues of both benefits and costs arising from a project. In the financial analysis, the concern of the

analysis is to evaluate the stream of costs attached to a project and deduct same from the stream of benefits.

If the stream of benefits is greater than the stream of costs, then project in question has a positive value and should be accepted, all things being equal. However, if the stream of costs is greater than the stream of benefits, then the project in question has a negative value and should not be accepted, all things being equal.

Economic analysis also concerns itself with costs and benefits arising from a project. If the stream of benefits is greater than the stream of costs, then the project in question has a positive value and should be accepted.

However, if the stream of costs is greater than the stream of benefits, then the project in question has a negative value and should not be accepted, all things being equal. So we could say that financial analysis and economic analysis both concern themselves with costs and benefits arising from a project. In the end, they provide answers to the question of whether a project should be acceptable or not. In evaluating projects, both use discounting and compounding techniques to arrive at their answers.

However, there exist conceptual differences between financial analysis and economic analysis. While financial analysis has a primary objective of establishing the viability and acceptability of a project from a financial view point, paying no attention to society, economic analysis has the objective of establishing the fact that a project is acceptable or not to the society as a whole. So while financial analysis has a micro objective, economic analysis has a macro objective.

Finally, in reaching a decision as to whether or not to accept a project, financial analysis and economic analysis both try to establish a relationship between costs and benefits.

For example in financial analysis, costs and benefits arising from a project are usually defined in monetary variables such as profits. But economic analysis goes really beyond the vague definitions of profit. In Economic analysis, costs are defined in terms of opportunity costs or foregone costs to the society as a whole.

SELF ASSESSMENT EXERCISE 1

Compare and contrast financial analysis and economic analysis.

3.2 The Nature of Economic Analysis

In economic analysis, the costs and benefits attached to a project are usually compared before a decision can be reached on whether or not to accept a project.

In the literature, there exist three discounted measures of project worth which we will now discuss:

The Net Present Worth

The net present worth is the difference between the present worth of benefits and the present worth of costs. We can write thus:
Net Present Worth = (Present Worth of benefits) - (Present Worth of costs)
Generally, according to the net present worth theory, a project is acceptable if the net present worth is positive. If the net present worth is negative, the project will be rejected.

Benefit-Cost Ratio
If you divide the present worth of benefits of a project by the present worth of its costs, then you have what is known as the benefit-cost ratio. We can write thus:

$$\text{Benefit-Cost ratio} = \frac{\text{Present worth of benefits}}{\text{Present worth of costs}}$$

Generally, a project is acceptable if the benefit-cost ratio is greater than 1 (one).
If the benefit-cost ratio is exactly 1 (one), that project is a break even project.

The Internal Rate of Return (IRR)
The internal rate of return is a discount rate where the present worth of benefits is equal to the present worth of costs.
Under the internal rate of return evaluation method, a project will be acceptable if its internal rate of return is higher than the firm‟s required rate of return.
The starting point of economic analysis is the financial analysis of a project which should be properly concluded before embarking on an economic analysis. Some adjustments will be made to the calculations to arrive at economic data.
First, it may be necessary to include or exclude some costs and benefits which may have been included or excluded from the financial analysis.
Secondly, some project inputs and outputs may have to be revalued if their shadow prices differ significantly from their market prices.

SELF ASSESSMENT EXERCISE 2
Discuss the nature of economic analysis with emphasis on the methods of evaluating the worth of a project.

3.3 Adjustments to Financial Analyses
We have stated that the starting point of an economic analysis is a financial analysis, so if we have financial data on financial analysis, we need to make some adjustments to the financial analysis to arrive at economic analysis data. We shall now consider some of the adjustments:

Transfer Payments

Transfer payments represent transfer of resources from one section of society to another. They do not make any claim on the country‟s resources and as such, their impact should be clearly distinguished and analysed in the economic analysis.

One of the first transfer payments we shall consider is interest. Interest is a reward for capital. For example, if a project is funded through a bank loan, the interest component is included in the profit and loss statement. The interest charges in the profit and loss statement represent transfer payments from a project to the provider of funds. What the project lost (interest) has become a gain to the provider of funds.

In effect, both figures are equal and cancel out without any net increase to society of funds. Therefore in economic analysis, interest charges are excluded since they only represent transfer payments.

The second transfer payment we shall consider is tax. When a project is profitable it is expected to pay taxes to the government at the ruling rate. In computing the profit of a project taxes are deducted to arrive at net profit. Taxes therefore appear as outgoing cash flows. Taxes represent transfer payments from a project to government.

In the economic analysis of a project, taxes are excluded because from the point of view of the society, they are only a transfer of resources from one section of the economy to another.

The third transfer payment is subsidies. In a traditional private sectors setting, it would be unheard of to talk of subsidies. But in economic analysis, subsidies appear as important data. Most public sector projects enjoy government subsidies to enable the poor gain access to certain services which ordinarily they cannot afford without government assistance. Subsidies represent opportunity costs to a nation as a whole.

Therefore in estimating the true cost of a project in an economic analysis, subsidies should be included.

3.4 Linkage Effects of a Project

Consider a simple case where a university is newly located in an environment. Many investments will begin to spring up. New housing developments will begin to spring up; canteens will begin to spring up; hair dressing salons, etc. will begin to spring up to cater for the needs of the new university community. Such constitute the linkage effects of a project.

Generally, there are two types of linkage effects which we shall briefly discuss:

Forward Linkage Effects

Forward linkage is the stimulus given to industries that use the products of a project. A case in point is a flour manufacturing project. Flour has so many uses. If a flour mill is located in an environment, it will lead to the establishment of such projects as bakeries which will use the flour.

Backward Linkage Effects

Backward linkage demonstrates the stimulus to industries that supply the inputs to a project. For example, the establishment of a flour mill in an environment will lead to demand for wheat which is a major input for flour mill. The flour mill will lead to investment in wheat cultivation.
Also, the establishment of a car assembly plant will lead to the establishment of tyre manufacturing plants that need to supply tyres to the car assembly plant.

Example of an Economic Analysis

In the year 2006, the World Bank was considering the desirability or otherwise of assisting Nigeria set up an ethanol plant covering thousands of hectares in the Niger Delta area.
Under the scheme, young farmers will be allocated hectares of land for subsidized cassava cultivation. Such inputs like fertilizers will be heavily subsidized while technical advice will be provided by the World Bank/ Nigerian agricultural experts.

4.0 CONCLUSION

In this unit, we discussed the nature of economic analysis and compared it with the financial analysis of a project. We discussed net present benefit cost ratio and the internal rate of return (IRR).

5.0 SUMMARY

Introduction to economic analysis has provided us with the tools to conduct economic analyses, with financial analyses as a starting point.
Financial analysis is the private sector‟s view of a project without considering a project‟s impact on the society. Economic analysis is a macro view of a project, taking into consideration the project‟s impact on society.

6.0 TUTOR-MARKED ASSIGNMENT

What do you see as the basic differences between the financial analysis of a project and the economic analysis of a project?

7.0 REFERENCES/FURTHER READINGS

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UNIT 14: MANPOWER PLANNING AND EVALUATION

CONTENTS

1.0 INTRODUCTION

In Unit 5, we discussed the concept of an engineering evaluation of a project. Engineering evaluation of a project as we saw seeks to evaluate the engineering soundness of a project. This is very crucial especially when the project will be ranked or compared with another project.

Every enterprise requires labour. It is labour that coordinates the other factors of production like land and capital. In terms of project evaluation, our concern is to look at the project and examine the human resources aspects. In terms of manpower planning and evaluation, we need to examine the following:

- Key employees
- The key responsibilities
- The qualifications
- Hours of work
- Training and development of the staff
- Remuneration of the staff

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain manpower planning and evaluation
- discuss the practical applications in industry.

3.0 MAIN CONTENTS

3.1 Manpower Planning and Evaluation

In general terms organising manpower in an organisation is the process of assigning duties amongst personnel and coordinating efforts towards the attainment of the firm‟s objectives. But before organising, there must be a plan. It is the plan that leads to the shaping of an organisation‟s structure.

Conceptually, the project initiative in structuring the organisation should be concerned about two critical things.

• Job definitions in the project under consideration

• Departmentalisation which follows job definitions. In doing this, similar jobs are grouped together to form a department. The most common way of organising a project is by function.

For example a manufacturing plant may be divided into three types namely:

• Production
• Marketing
• Finance

There are two uses of the manpower plan. The first use is by the project initiator. When the project initiator is structuring the project, the manpower plan definitely is a critical component. The project initiator needs to know well in advance who the key employees will be. The key employees will depend on the nature of the business in question. If the business is, for example, soap manufacturing, then a lot of the production staff should be industrial or pure scientists plus other core support staff. Apart from that, each employee should have their various responsibilities. For example, in a soap plant, you will have production staff and also quality control staff. They have difference responsibility. And of course, the qualifications of the various staff including their years of experience should be properly documented and evaluated.

The second use of the manpower plan is that financial institutions like banks, before granting loans or overdraft for a project, usually insist on being convinced of the management skills that will be available or are actually available in the firm that seeks to borrow money. They will look at the people concerned, their qualifications and match them with the jobs allocated to them.

Hours of work and the salary and wages of the entire work force are another critical input. The salary and wages of those working on a project is actually expected to hover around the average for the industry.

In practical terms, the manpower of a project can be grouped into two namely:

• Direct labour • Indirect labour

(a) Direct Labour

When we talk about direct labour in a manufacturing project, e.g., a soap plant, we are talking about staff attached to the actual production of the soap. The production manager, production supervisor and factory attendants are all direct labour.

(b) Indirect Labour

Indirect labours on the other hand are those workers who do not work directly on the manufactured goods but indirectly. They include accounting and admin staff, marketing staff and others. We have an example of a manpower plan. It contains the following:

• Manpower requirements of the project broken down into direct and indirect labour

• Remuneration of the staff

SELF ASSESSMENT EXERCISE

List and explain four departments that could be found in a big manufacturing firm.

4.0 CONCLUSION

This unit has treated manpower planning and evaluation which is a critical aspect of evaluation of projects. The unit has focused attention on the manpower aspects of a project

5.0 SUMMARY

In this unit, we have discussed manpower planning and evaluation. We have seen how manpower planning involves the assigning of duties to personnel and have also tried to relate manpower to a firm‟s objectives. We also saw that departmentalisation is a critical aspect of a manpower plan. Also we discussed the use of the manpower plan. We saw that the manpower plan can be used by two different groups of people – the project initiator and the evaluator.

6.0 TUTOR-MARKED ASSIGNMENT

Why is a manpower plan important in a start-up project?

7.0 REFERENCES/FURTHER READINGS

Leon Ikpe (1999). Project Analysis and Evaluation. Lagos: Impressed Publishers.

UNIT 15: MARKET ANALYSIS

CONTENTS

1.0 INTRODUCTION

A key part of any business plan is the market analysis. This section needs to demonstrate both your expertise in your particular market and the attractiveness of the market from a financial standpoint.

The goal of a market analysis is to determine the attractiveness of a market and to understand its evolving opportunities and threats as they relate to the strengths and weaknesses of the firm.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

• explain the meaning of market analysis
• Different Methods of Market Analysis

3.0 MAIN CONTENTS

3.1 Definition of Market Analysis

A market analysis is a quantitative and qualitative assessment of a market. It looks into the size of the market both in volume and in value, the various customer segments and buying patterns, the competition, and the economic environment in terms of barriers to entry and regulation.

A market analysis studies the attractiveness and the dynamics of a special market within a special industry. It is part of the industry analysis and thus in turn of the global environmental analysis. Through all of these analyses, the strengths, weaknesses, opportunities and threats (SWOT) of a company can be identified. Finally, with the help of a SWOT analysis, adequate business strategies of a company will be

defined. The market analysis is also known as a documented investigation of a market that is used to inform a firm's planning activities, particularly around decisions of inventory, purchase, work force expansion/contraction, facility expansion, purchases of capital equipment, promotional activities, and many other aspects of a company.

A marketing analysis is a study of the dynamism of the market. It is the attractiveness of a special market in a specific industry. Marketing analysis is basically a business plan that presents information regarding the market in which you are operating in. It deals with various factors.

3.1.1 What are the factors of market analysis

The most common factors are the SWOT which is an acronym for; Strengths, Weaknesses, Opportunities, and Threats. By assessing the company‟s strengths and weaknesses, you can make a strategy on which factors to focus upon. If you have a good labor force, ample investment and good advertising experts then you are going to make your marketing strategy focusing on those things. Similarly if your technology is comparatively poorer and you lack online presence then you are going to avoid those things. You also look at external factors like situations which may you with an opportunity or threat. Economic factors, political instabilities or even social changes can give you opportunities which you can seize and do better. They can also create threats which are going to hamper your business dealings. Considering all these factors will give you a marketing analysis from which you can implement your decisions.

3.1.2 Dimensions of Marketing Analysis

There are certain dimensions which help us to perform a marketing analysis. These things help us understand the market we operate in better. These dimensions include;

Market Size: The size of the market is a key factor in a marketing analysis. The bigger the market the more competitors you are likely to have. For a big market, you need to make sure your products and services stand out. Otherwise, the customers can easily switch to a rival product. Not only that, a bigger market makes you rethink your pricing policy. Set your price too high then you are going to lose your customer base to other competitors. Set it too low and people will think that you are just providing cheaper poor quality goods. If the market size is small then you can get away with charging a high price. All these facts are kept in the marketing analysis. Based on that you go ahead with your marketing plan.

Growth rate of the market: The market growth rate is a huge factor in any sort of marketing analysis. This is because you get the idea of how long the said market will last. Before you make an investment you need to analyze the market‟s growth rate. If it is likely to grow over time then

you can invest more in it. If it has no growth then you are likely to be discouraged from investing anything at all. How much time and importance you give to the market depends on its growth rate.

Market Trends: Market trends are a significant part of the marketing analysis. Having knowledge about the trends help you to decide what kind of product you are going to sell. When you are starting off a business you need to know what the current trend is. What is the thing that the customers like? How much they are willing to spend? What other trends may capture their attention? These are the sort of things which will go on your analysis. On the other hand, market trends can change any day. This can turn out to be an opportunity for your business. If that‟s the case then you can seize it and make the most of it. Changes in trend can also be a threat for you. If you are comfortable producing one kind of good then a market trend change will affect you the most.

Market Profitability: Most companies‟ motive to get into the business is to make a profit. In other words, they are profit-motive businesses. So before getting into a business you need to analyze the profitability of the market. If the market has a good profitability then only you are going to invest heavily. Otherwise, it would be a waste of your time and capital. In order to calculate the profitability of the market, there are a few things one has to consider. These things include; buyer power, supplier power, barriers to entry and so on.

Key Success Factors: The key success factors are those elements which help the business to achieve great success in the market. Such elements are required to stand out among the rest of the competition. These are things which you did well that have enabled you to produce great results. Key success factors include;

1. Technology progress
2. Economies of scale
3. Efficient utilization of resources

Distribution Channels: Distribution channels are very important for a business. Without those, you won‟t be able to get your products to your customers. So it becomes a big factor in a marketing analysis. This is because you need to assess how well the channels are. If the existing ones are good enough or you need to develop newer ones. Sometimes you come up with brand new channels like online marketing.

Industry Cost Structure: The industry cost structure is a significant factor while running a business. It basically sees how much cost is required to get your products for sale. Sometimes firms can come up with ways to decrease that cost and thereby make a bigger profit without increasing the market price. Doing a marketing analysis will help you to come up with newer ways to reduce cost. At the same time, it helps to create strategies for developing a competitive advantage of your rivals.

3.1.3 Different Methods of Market Analysis

Companies need information about the market and surrounding business environment in order to maintain success. Various methods of market analysis are available so companies can gather the requisite information for external factors. Common market analysis options include surveys, focus groups, observation, field trials, or other methods. Regardless of the approach used, the methods of market analysis should provide valuable information the company did not have before. The gathered data should also allow a company to improve operations and be stronger than competitors.

Surveys are among the most common market analysis tools. Companies can send out mailers and e-mails or use telephone surveys to gather consumer data. The information from the survey typically provides information on the desires, perceptions, and wants of consumers. New products, product quality, or product lines are often the result of this information. These surveys may also reveal information on other products purchased.

i. Focus groups are a bit more personal when compared to standard surveys. Companies often select a few individuals to come in and discuss or test a new product. The information here allows a company to review consumer feedback and ask the focus group participants questions. Though focus groups are a bit more expensive than surveys, these methods of market analysis can glean more information. A drawback to focus groups can be the internal bias in any individual in the group.

ii. Observation may be among the easiest methods of market analysis. Essentially, internal stakeholders simply look around the market and business environment at what other companies are doing. A review of competitors and other successful products can help a company determine the future of the market. A flaw in this method is the inability to apply quantitative analysis to the analysis process. Observation may also not determine the internal profits a competitor earns from its products.

iii. Field trials typically represent one of the most expensive methods of market analysis available to the company. The business can create a small group of products and test them in select markets around the larger region. Information from each test market allows a company toassess how general consumers react along with any associated marketing or other programs attached to the product. If successful, the market analysis can help a company complete a rollout in a nationwide sense. As the company already has a partial system in place for distributing goods, a complete rollout is typically easier to process after a field trial.

3.1.4 Different Types of Business Analysis Tools

Business analysis tools are different methods stakeholders use to assess a company‟s operations. In most cases, the purpose of the analysis is to determine how effective or efficient a company is in the overall market.

A few different tools are accounting ratios, SWOT analysis, and the balanced scorecard. Each one takes a different approach when reviewing the company‟s financial and nonfinancial aspects. Both internal and external stakeholders can use business analysis tools as a determination of a company‟s overall strength in the business environment.

Accounting ratios are among the easier analysis tools to compute and use in business assessment. These ratios use information from both the income statement and balance sheet in order to provide indicators of a company‟s financial strength. In particular, the ratios measure a company‟s liquidity, profitability, asset use, and financial leverage along with other financial areas. While a good tool for use at the end of each month, financial ratios do have some flaws. First, the ratios are useless by themselves as they need another source for comparison; second, the ratios only use information from the financial statement for review.

SWOT stands for strengths, weaknesses, opportunities, and threats. In terms of business analysis tools, SWOT analysis is valuable because it reviews both internal and external factors that can relate to a company‟s operations. Strengths and weaknesses are the internal factors; essentially, they are the things a business does well and does not do well. Opportunities and threats represent the external factors. Opportunities are new items or business areas in which a company can engage, while threats represent the potential competitors in the market or new opportunities.

The balanced scorecard is an increasingly popular assessment among other business analysis tools. The scorecard has four different perspectives: financial, business process, learning and growth, and customer. Each perspective looks at specific information related to its overarching focus. Taken together, all perspectives should provide information that helps a company reach its goals and develop strategies. The balanced scorecard may also be able to help a company plan future operations.

Other business analysis tools are available for a company to use if necessary. Owners and executives can often review other tools, such as decision trees, risk analysis, or game theory among others. The important thing to remember is selecting a tool that allows a company to include all factors necessary for the assessment process. Hiring a consultant may also be possible to review and improve a company‟s operations. Either way, a company should use whatever works best for the business.

3.2 Types of Market Failure

A market failure is a situation where free markets fail to allocate resources efficiently. Economists identify the following cases of market failure:

Productive and allocative inefficiency

Markets may fail to produce and allocate scarce resources in the most efficient way.

Monopoly power

Markets may fail to control the abuses of monopoly power.

Missing markets

Markets may fail to form, resulting in a failure to meet a need or want, such as the need for public goods, such as defence, street lighting, and highways.

Incomplete markets

Markets may fail to produce enough merit goods, such as education and healthcare.

De-merit goods

Markets may also fail to control the manufacture and sale of goods like cigarettes and alcohol, which have less merit than consumers perceive.

Negative externalities

Consumers and producers may fail to take into account the effects of their actions on *third-parties*, such as car drivers, who may fail to take into account the traffic congestion they create for others. Third-parties are individuals, organisations, or communities indirectly benefiting or suffering as a result of the actions of consumers and producers attempting to pursue their own self interest.

Property rights

Markets work most effectively when consumers and producers are granted the right to own property, but in many cases property rights cannot easily be allocated to certain resources. Failure to assign property rights may limit the ability of markets to form.

Information failure

Markets may not provide enough information because, during a market transaction, it may not be in the interests of one party to provide full information to the other party.

Unstable markets

Sometimes markets become highly unstable, and a stable equilibrium may not be established, such as with certain agricultural markets, foreign exchange, and credit markets. Such volatility may require intervention.

Inequality

Markets may also fail to limit the size of the gap between income earners, the so-called *income gap*. Market transactions reward consumers and producers with incomes and profits, but these rewards may be concentrated in the hands of a few.

Remedies

In order to reduce or eliminate market failures, governments can choose two basic strategies:

Use the price mechanism

The first strategy is to implement policies that change the behaviour of consumers and producers by using the price mechanism. For example,

this could mean increasing the price of „harmful‟ products, through taxation, and providing subsidies for the „beneficial‟ products. In this way, behaviour is changed through financial incentives, much the same way that markets work to allocate resources.

Use legislation and force

The second strategy is to use the force of the law to change behaviour. For example, by banning cars from city centers, or having a licensing system for the sale of alcohol, or by penalising polluters, the unwanted behaviour may be controlled.

In the majority of cases of market failure, a combination of remedies is most likely to succeed.

3.3 Types of Stock Market Analysis

Fundamental Analysis

The goal of fundamental analysis is to determine whether a company‟s future value is accurately reflected in its current stock price.

Fundamental analysis attempts to estimate the value of a particular stock based on a variety of factors, such as the current finances of the company and the prevailing economic environment. Fundamental analysis also may include speaking with a company‟s management team and assessing how the company‟s products are received in the marketplace.

When a fundamental review is complete, the analyst may decide the stock is an attractive opportunity because the market has underestimated its future prospects. The analyst also may determine the stock to be a "hold" or a "sell" if the value is fully reflected in the price.

Technical Analysis

Technical analysts evaluate recent trading movements and trends to attempt to determine what‟s next for a company‟s stock price. Generally, technical analysts pay less attention to the fundamentals underlying the stock price.

Technical analysts rely on stock charts to make their assessment of a company‟s stock price. For example, technicians may look for a support level and resistance level when assessing a stock‟s next move. A support level is a price level at which the stock might find support and below which it may not fall. In contrast, a resistance level is a price at which the stock might find pressure and above which it may not rise.

Sentimental Analysis

Sentimental analysis attempts to measure the market in terms of the attitudes of investors. Sentimental analysis starts from the assumption that the majority of investors are wrong. In other words, that the stock market has the potential to disappoint when "masses of investors" believe prices are headed in a particular direction.

Sentiment analysts are often referred to as contrarians who look to invest against the majority view of the market. For example, if the majority of professional market watchers expect a stock price to trend higher, sentiment analysts may look for prices to disappoint the majority and trend lower.

Which approach is best? There is no clear answer to that question. But it's important to remember three things: Past performance does not guarantee future results, actual results will vary, and the best approach may be to create a portfolio based on your time horizon, risk tolerance, and goals.

3.4 How to do a market analysis

The objectives of the market analysis section of a business plan are to show to investors that:

- you know your market
- the market is large enough to build a sustainable business

In order to do that, the following plans are recommended:

1. Demographics and Segmentation
2. Target Market
3. Market Need
4. Competition
5. Barriers to Entry
6. Regulation

The first step of the analysis consists in assessing the size of the market.

Demographics and Segmentation

When assessing the size of the market, your approach will depend on the type of business you are selling to investors. If your business plan is for a small shop or a restaurant then you need to take a local approach and try to assess the market around your shop. If you are writing a business plan for a restaurant chain then you need to assess the market a national level.

Depending on your market you might also want to slice it into different segments. This is especially relevant if you or your competitors focus only on certain segments.

Volume & Value

There are two factors you need to look at when assessing the size of a market: the number of potential customers and the value of the market. It is very important to look at both numbers separately, let's take an example to understand why.

Imagine that you have the opportunity to open a shop either in Town A or in Town B: 77 Table: Town A vs. Town B

Town	A	B	
Market value	#200m	#100m	
Potential customers	2 big companies	1,000	small

		companies
Competition	2 competitors	10 competitors

Table: Town A vs. Town B

Although Town B looks more competitive (10 competitors vs. 2 in Town A) and a smaller opportunity (market size of #100m vs. #200 in Town A), with 1,000 potential customers it is actually a more accessible market than Town A where you have only 2 potential customers.

Potential customer?

The definition of a potential customer will depend on your type of business. For example if you are opening a small shop selling office furniture then your market will be all the companies within your delivery range. As in the example above it is likely that most companies would have only one person in charge of purchasing furniture hence you wouldn't take the size of these businesses in consideration when assessing the number of potential customers. You would however factor it when assessing the value of the market.

Market value

Estimating the market value is often more difficult than assessing the number of potential customers. The first thing to do is to see if the figure is publicly available as either published by a consultancy firm or by a state body. It is very likely that you will find at least a number on a national level.

If not then you can either buy some market research or try to estimate it yourself.

Methods for building an estimate

There are 2 methods that can be used to build estimates: the bottom up approach or the top down approach.

The bottom up approach consist in building a global number starting with unitary values. In our case the number of potential clients multiplied by an average transaction value.

Let's keep our office furniture example and try to estimate the value of the 'desk' segment. We would first factor in the size of the businesses in our delivery range in order to come up with the size of the desks park. Then we would try to estimate the renewal rate of the park to get the volume of annual transactions. Finally, we would apply an average price to the annual volume of transactions to get to the estimated market value.

Here is a summary of the steps including where to find the information:

1. Size of desks park = number of businesses in delivery area x number of employees (you might want to refine this number based on the sector as not all employees have desks)
2. Renewal rate = 1 / useful life of a desk
3. Volume of transactions = size of desks park x renewal rate
4. Value of 1 transaction = average price of a desk
5. Market value = volume of transactions x value of 1 transaction

You should be able to find most of the information for free in this example. You can get the number and size of businesses in your delivery area from the national statistics. Your accountant should be able to give you the useful life of a desk (but you should know it since it is your market!). You can compare the desk prices of other furniture stores in your area. As a side note here: it is always a good idea to ask your competitors for market data (just don't say you are going to compete with them).

Target Market

The target market is the type of customers you target within the market. For example if you are selling jewellery you can either be a generalist or decide to focus on the high end or the lower end of the market. This section is relevant when your market has clear segments with different drivers of demand. In my example of jewels, value for money would be one of the drivers of the lower end market whereas exclusivity and prestige would drive the high end.

Now it is time to focus on the more qualitative side of the market analysis by looking at what drives the demand.

Market Need

This section is very important as it is where you show your potential investor that you have an intimate knowledge of your market. You know why they buy!

Here you need to get into the details of the drivers of demand for your product or services. One way to look at what a driver is, is to look at takeaway coffee. One of the drivers for coffee is consistency. The coffee one buys in a chain is not necessarily better than the one from the independent coffee shop next door. But if you are not from the area then you don't know what the independent coffee shop's coffee is worth. Whereas you know that the coffee from the chain will taste just like in every other shop of this chain. Hence most people on the move buy coffee from chains rather than independent coffee shops.

From a tactical point of view, this section is also where you need to place your competitive edge without mentioning it explicitly. In the following sections of your business plan you are going to talk about your competition and their strengths, weaknesses and market positioning before reaching the Strategy section in which you'll explain your own market positioning. What you want to do is prepare the reader to embrace your positioning and invest in your company.

To do so you need to highlight in this section some of the drivers that your competition has not been focusing on. A quick example for an independent coffee shop surrounded by coffee chains would be to say that on top of consistency, which is relevant for people on the move, another driver for coffee shop demand is the place itself as what coffee shops sell before most is a place for people to meet. You would then

present your competition. And in the Strategy section explain that you will focus on locals looking for a place to meet rather than takeaway coffee and that your differentiating factor will be the authenticity and atmosphere of your local shop.

Competition

The aim of this section is to give a fair view of who you are competing against. You need to explain your competitors' positioning and describe their strengths and weaknesses. You should write this part in parallel with the Competitive Edge part of the Strategy section.

The idea here is to analyse your competitors angle to the market in order to find a weakness that your company will be able to use in its own market positioning.

One way to carry the analysis is to benchmark your competitor against each of the key drivers of demand for your market (price, quality, add-on services, etc.) and present the results in a table.

Below is an example for a furniture shop in France. As you can see from the table all the actors on the market are currently focused on the low medium range of the market leaving the space free for a high end focused new player.

Barriers to Entry

This section is all about answering two questions from your investors:

1. what prevents someone from opening a shop in front of yours and take 50% of your business?
2. having answered the previous question what makes you think you will be successful in trying to enter this market? (start-up only)

As you would have guess barriers to entry are great. Investors love them and there is one reason for this: it protects your business from new competition!

Here are a few examples of barriers to entry:

- Investment (project that require a substantial investment)
- Technology (sophisticated technology a website is not one, knowing how to process uranium is)
- Brand (the huge marketing costs required to get to a certain level of recognition)
- Regulation (licences and concessions in particular)
- Access to resources (exclusivity with suppliers, proprietary resources)
- Access to distribution channels (exclusivity with distributors, proprietary network)
- Location (a shop on Regent's Street)

The answer to the questions above will be highly dependent on your type of business, your management team and any relations it might have. Therefore it is hard for me to give any general tips about it.

Regulation

If regulation is a barrier at entry in your sector then I would advise you to merge this section with the previous one. Otherwise this section should be just a tick the box exercise where you explain the main regulations applicable to your business and which steps you are going to take to remain compliant.

4.0 CONCLUSION

We have fully discussed the market analysis. We discussed the definition and method of market analysis.

5.0 SUMMARY

Understanding market analysis and different Types of Business Analysis Tools

6.0 TUTOR-MARKED ASSIGNMENT

(1) What are the factors of market analysis
(2) Dimensions of Marketing Analysis
(3) Different Methods of Market Analysis
(4) Different Types of Business Analysis Tools
(5) Types of Market Failure
(6) Types of Stock Market Analysis

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MODULE 5: PROBLEMS OF PLANNING IN COOPERATIVES IN THIRD WORLD COUNTRIES

UNIT 16: MICRO PROBLEMS OF PLANNING IN CO-OPERATIVES

UNIT 17: MACRO PROBLEMS OF PLAN IMPLEMENTATION AND PLAN FAILURE IN THIRD WORLD COUNTRIES

UNIT 16: MICRO PROBLEMS OF PLANNING IN CO-OPERATIVES

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1.0 INTRODUCTION

This unit deals with the problems confronting agricultural co-operatives in Nigeria. You will recollect that in Unit 2, we dealt with co-operatives and make particular reference to agricultural co-operatives. These problems discussed in this unit retarded the growth of agricultural Cooperatives. Definitely if efforts are geared towards the solutions of these problems the rate of agricultural development will be increased and more food production will be noticed in the markets which will directly leads to increase in farmers' income and standard of living in the rural areas. The general effect will be self-sufficient in food production, a final direct effect on the National Output and an increase in the foreign exchange earnings as it was the case in the early 1960s with agriculture in Nigeria.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the problems of agricultural co-operatives; and
- examine the problems with their solutions.

3.0 MAIN CONTENT

3.1 The Problems

Agricultural co-operatives all-over the worlds are subject to problems that may hinder the growth and development of any group. Problems which are specific to farmers group in Nigeria will be fully discussed here. These include the following:

3.2 Inconsistent Policy

Government lack basic consistent policy on the establishment and management of agricultural co-operatives. What we have may be referred to as management statements based on projects which in themselves are planned and run on an ad-hoc basis. In this regard, any project initiated by a particular government regime is usually phased out with the exit of such a government. The Operation Feed the Nation (OFN) Programme gave way to Green Revolution Programme with change of government in 1979.

The instability of the Federal Department of Agricultural Co-operatives is another factor which hinders development of Agricultural Cooperatives in Nigeria. The Federal Department of Agricultural Cooperatives was carved out of the Federal Department of Co-operatives where it was a division in 1979. It was moved to the Federal Ministry of Agricultural Co-operatives Policy. The department provides institutional supports for effective performance of agricultural co-operatives in the country, through:

a. Provision of on-farm storage depots to farmers co-operatives

b. Effective distribution and marketing of inputs (fertilizers and agro-chemicals) and outputs through the National Agricultural Co-operative and Marketing Organization (NACMO).
c. Facilitating co-operative groups access to credit and security through the Nigerian Agricultural Insurance Company (NAIC) respectively.

In 1989, the Federal Department of Agricultural Co-operatives activities were almost grinding to a halt consequent upon its transfer to Directorate of food, Road and Rural Infrastructure (DFRRI) under the Presidency. The commencement of the Federal Government rationalization of ministries in 1992, returned the Agricultural Cooperatives Department to .the Federal Ministry of Agriculture. The frequent movement of the department hampered .the performance of its function within this period. There is need for consistency in the implementation of the agricultural co-operative polity. Agencies responsible for the implementation of agricultural co-operatives development policy need be provided and enabling environment for effective performance and achievement of their laudable objectives.

3.3 Lack of Educational and Administrative Guidance

The poor performance of the agricultural co-operatives in Nigeria is also attributed to lack of administrative guanaco and inefficient management capabilities of members and elected representatives. Farmers willing to form co-operatives may lack knowledge of what to do and how to go about it. This dampens their enthusiasm and they revert to individual peasantry. Besides, the problems of extension services make it very difficult for extension officers to have frequent contact with the fanner co-operators.
Adequate planning need be made for continuing education of farmer cooperators. Farmers all over the world rely on extension agents for educational guidance on how to form and manage co-operative societies. They need to know the elements such as membership size personal character of prospective member of the society, co-operative principles, laws and values, management principles and functions etc.
This problem can be addressed through vigorous co-operative education and management training programmes at Federal, State Governments and co-operatives movement level.

3.4 Lack of Capital

The most frequently demeaned services by farmers is financial assistance. They actually need adequate capital to start any meaningful agricultural production. It could be recollected that so many studies have been carried out with facts and figures and came to the conclusion that capital is the basis of farmers joining the co-operative societies and only few i.e. below 45% have benefited from financial assistance of the society when really in need of fund.

This is an indication that co-operative societies are short of funds to meet the financial needs of their members. It therefore implies that cooperatives need to intensity efforts in sourcing for capital from other financial institutions in order to fulfill the aspirations of members. However, there are difficulties in obtaining finance from those institutions especially in terms of collateral especially from the commercial banks.

3.5 Lack of Storage Facilities

Storage may be defined as the act of preserving and keeping agricultural produce or any commodity for future use without necessarily losing its quality. This problem is most critical in developing countries.

Until we address this particular problem over 70% of our food production will always be lost annually. The importance of storage is enormous and cannot be overemphasized.

3.6 Lack of Process and Inefficient Marketing Scheme

You should remember our discussion of the factors in unit three. The main objective of farmers' co-operatives is to increase member's production through the provision of enabling services. However, due to absence of our inadequate storage, processing facilities and marketing outlets, increase production merely results in farmer's frustration. Hence, there is need for provision of adequate processing: storage facilities and marketing outlets for agricultural produce.

3.7 Lack of Infrastructural and Social Facilities in the Rural Areas

Lack of facilities such as transportation, electricity, water supply, health services, recreational facilities etc. constitutes a hindrance to effectiveness of agricultural co- operatives in rural areas. Existence of these facilities provides an enabling environment for agricultural cooperatives to thrive. Hence, the farmers should be provided with good access roads, good water supply (needed by people, livestock and crops), electricity, basic health care services and appropriate educational facilities. These will tend to stabilize the rural population thus arresting the rural-urban migration, (which is prevalent in the country because of greater wages and comparatively higher standard of living in the urban areas). Therefore, to have a sustained agricultural growth, the farmer (co-operator) should not only be white and blue collar job in tl1e cities) but also be assured of comfortable living conditions in his/her own rural area.

3.8 Lack of Patronage and Membership Qualities

Patronage by the farmer members is one of the key requirements of any co- operative organization. Therefore, the contribution of every member of the co-operative society not necessarily in terms of money but in interest and active participation in running of the society is important for

its success. In Nigeria, members patronage of their societies especially farmer's co-operative societies is very poor. Quite often, a high proportion of members are apathetic to the group activities. This may arise from a number of reasons among which include:

1. Farmers may feel that they spend too much time and energy on the activities of co- operatives and that the benefits they get are not commensurate with the time and energy expended on the society.
2. The returns from 1arms operated by farmers individually may exceed their own share from a co-operative enterprise.
3. Co-operative leaders may be authoritarian or government may exert excessive control on the co -operatives.
4. Farmer - members of co-operative society may feel that the surpluses or the society are not equitably disturbed to them according to their efforts. They also feel cheated if they discover any act of misappropriation of their funds by their representatives. Managers, Secretaries. Etc.
5. The society may be unable to meet its financial obligations promptly e.g. paying each for the farmers, produce .at the time of delivery. A study by Aweto (1984).revealed that about 46% of society's members do not sell all their produce through their society. It was discover that these farmers prefer selling a proportion of their produce to private licensed buying agent who pay cash for the produce when they are in need of money rather than sell to their society. This is due to the fact that the society is not able to make advance payment for the produce delivered by the members.

Another major fault in co -operative farming is the small size and qualities of the members. Members may be too few to make for effective farm operation. Besides, they may be too poor to make any substantial contribution to the initial share capital of tile society.

3.9 Fraud

Fraudulent and dishonest practices have been widely identified as the most serious all which hinders the growth of co-operative endeavors in the country.

Corruption and embezzlement could be widespread among co-operators themselves or amongst the co-operative fund. This consequence has made many co-operative societies or union bankrupt. Sometimes, the administrators or co-operative personnel such as co-operative officers exploit the ignorance of the members by embalming the society's fund. Corruption can also occur if there is not adequate auditing of the society's account.

This situation usually discourages farmer co-operators from participating fully in the co-operatives activities. Apart from this, it prevents potential co-operators from being involved in co-operative; activities .The problem of misappropriation of fund is further worsened by the numerous problems posed by the depressed economy. Thus,

cooperatives should evolve management strategies such as internal check or control system for preventing fraud. They also need to ensure that their business transactions are well managed so as to alleviate the problems of their business transactions are well managed so as to alleviate the problems of their employees and members.

3.10 Failure to Employ Competent Staff

Many co-operative societies do not engage the services of qualified and competent manager, secretaries etc. The practice of employing a Senior Secondary School Certificate holder or worse still, a candidate yet to pass his examination, as secretary, manager, book-keeping is common with co-operatives societies and unions. The only co-operative education and training received by these "managers" etc is the three months in-service training organized at the co-operative union levels. This invariably resulted in the poor performance of these societies.

3.11 Poor Management

As a result of employing incompetent staff without adequate education training, there is bound to be poor management of the societies hence many members discouraged in forming or joining co-operatives especially the farmers. Most agricultural co-operatives have died a natural death due to the poor management of all its activities which has been well explained under 3.9 (Fraud) most of the business transactions are not all managed coupled with the books of accounts which are poorly handled.

SELF-ASSESSMENT EXERCISE

i. List all the problems confronting co-operatives in Nigeria. ii. Discuss any two of them

4.0 CONCLUSION

Unless these problems militating against the rapid growth of agricultural co-operatives are attended to, there could be little or no success recorded along this line hence there is need for adequate attention to the solutions of all these problems.

5.0 SUMMARY

The various problems confronting agricultural co-operatives have been identified and examined while there is the need for an urgent or immediate solution to all the problems from the government and the cooperative groups.

6.0 TUTOR-MARKED ASSIGNMENT

Examine the micro and macro problems of co-operatives in Nigeria. In your own opinion, give some practical ways of solving the problems.

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UNIT 17: MACRO PROBLEMS OF PLAN IMPLEMENTATION AND PLAN FAILURE IN THIRD WORLD COUNTRIES

CONTENTS

1.0 INTRODUCTION

The results of development planning have been generally disappointing. The widespread rejection of comprehensive development planning based on poor performance has had a number of practical outcomes, the most important of which is the adoption in a majority of developing countries of a more market-oriented economic system.

2.0 OBJECTIVES

The main objective of this unit is to identify two interrelated sets of answers—one dealing with the gap between the theoretical economic benefits and the practical results of development planning, and the other associated with more fundamental defects in the planning process, especially as they relate to administrative capacities, political will, and plan implementation.

3.0

MAIN CONTENTS

3.1 Theory versus Practice: The principal economic arguments for planning briefly outlined earlier in this chapter—market failure, divergences between private and social valuations, resource mobilization, investment coordination, and the like—have often turned out to be weakly supported by the actual planning experience. It is doubtful whether plans have generated more useful signals for the future than would otherwise have been forthcoming; governments have rarely, in practice, reconciled private and social valuations except in a piecemeal manner; because they have seldom become operational documents, plans have probably had only limited impact in mobilizing resources and in coordinating economic policies.

To take the specific case of the market failure argument and the presumed role of governments in reconciling the divergence between private and social valuations of benefits and costs, the experience of government policy in many developing countries has been one of often *exacerbating* rather than reconciling these divergences—**government failure** rather than market failure.

Government policy often tends to increase rather than reduce the divergences between private and social valuations. For example, public policies have raised the level of wages above labor's shadow price or scarcity value by various devices such as minimum-wage legislation, tying wages to educational attainment, and structuring rates of remuneration at higher levels on the basis of international salary scales. Similarly, investment depreciation and tax allowances, overvalued exchange rates, low effective rates of protection, quotas, and credit rationing at low interest rates all serve to drop the private cost of capital far below its scarcity or social cost. The net effect of these factor price

distortions has been to encourage private and public enterprises to adopt more capital-intensive production methods than would exist if public policy attempted to correct the prices.

3.2 Deficiencies in Plans and Their Implementation: Plans are often overambitious. They try to accomplish too many objectives at once without consideration that some of the objectives are competing or even conflicting. They are often grandiose in design but vague on specific policies for achieving stated objectives.
In this they have much in common with the excessive lists of 60 to 100 or more issue areas in conditionality agreements set out by the World Bank and the International Monetary Fund (IMF). Finally, the gap between plan formulation and implementation is often enormous (many plans, for reasons to be discussed, are never implemented).

3.3 Insufficient and Unreliable Data: The economic value of a development plan depends to a great extent on the quality and reliability of the statistical data on which it is based. When these data are weak, unreliable, or nonexistent, as in many poor countries, the accuracy and internal consistency of economy-wide quantitative plans are greatly diminished. And when unreliable data are compounded by an inadequate supply of qualified economists, statisticians, and other planning personnel (as is also the situation in most poor nations), the attempt to formulate and carry out a comprehensive and detailed development plan is likely to be frustrated at all levels.

3.4 Unanticipated Economic Disturbances, External and Internal: Because most developing countries have open economies that are dependent on the vicissitudes of international trade, aid, "hot" speculative capital inflows, and private foreign investment, it becomes exceedingly difficult for them to engage in even short-term forecasting, let alone long-range planning. The oil price increases of the 1970s caused havoc in most development plans. But the energy crisis was only an extreme case of a general tendency for economic factors over which most governments in the developing world had little control to determine the success or failure of their development policies.

3.5 Institutional Weaknesses: The institutional weaknesses of the planning processes of most developing countries include the separation of the planning agency from the day-to-day decision-making machinery of government; the failure of planners, administrators, and political leaders to engage in continuous dialogue and internal communication about goals and strategies; and the international transfer of institutional planning practices and organizational arrangements that may be inappropriate to local conditions. In addition, there has been much concern about incompetent and unqualified civil servants; cumbersome

bureaucratic procedures; excessive caution and resistance to innovation and change; interministerial personal and departmental rivalries (e.g., finance ministries and planning agencies are often conflicting rather than cooperative forces in governments); lack of commitment to national goals as opposed to regional, departmental, or simply private objectives on the part of political leaders and government bureaucrats; and in accordance with this lack of national as opposed to personal interest, the political and bureaucratic corruption that is pervasive in many governments.

3.6 Lack of Political Will: Poor plan performance and the wide gap between plan formulation and plan implementation are also attributable to a lack of commitment and **political will** on the part of many developing-country leaders and highlevel decision makers.22 Political will entails much more than high-minded purposes and noble rhetoric. It requires an unusual ability and a great deal of political courage to challenge powerful elites and vested-interest groups and to persuade them that development is in the long-run interests of *all* citizens even though some of them may suffer short-term losses. In the absence of their support, be it freely offered or coerced, a will to develop on the part of politicians is likely to meet with staunch resistance, frustration, and internal conflict.

3.7 Conflict, Post conflict, and Fragile States: In extreme cases, violent conflict or the large-scale failure of a state to otherwise function meaningfully has resulted in catastrophic failure of even the most basic development objectives. In these cases, development assistance is usually essential.

4.0 CONCLUSION

In view of the forgoing examples, we may conclude that the gap between the theoretical economic benefits of planning and its practical results in most developing countries has been quite large. The gap between public rhetoric and economic reality has been even greater. While supposedly concerned with eliminating poverty, reducing inequality, and lowering unemployment, many planning policies in developing countries have in fact unwittingly contributed to their perpetuation. Some of the major explanations for this have to do with failures of the planning process itself; these failures in turn arise out of certain specific problems.

5.0 SUMMARY

Economic signals and incentives in many developing countries have served to exaggerate the private valuations of the returns to education at the secondary and tertiary levels to a point where the private demand for ever more years of schooling greatly exceeds the social payoff. The

tendency to ration scarce high-paying employment opportunities by level of completed education and the policy of most governments in the developing world to subsidize the private costs of education at the higher levels together have led to a situation in which the social returns to investment in further quantitative educational expansion seem hardly justified in comparison with alternative investment opportunities.

6.0 TUTOR-MARKED ASSIGNMENT

1. There is much talk today about the demise of development planning. Many observers assert
that development planning has been a failure. List and explain some of the major reasons for plan failures. Which reasons do you think are the most important? Explain your thinking.

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