UNIT 2 CIRCULAR FLOW OF ECONOMIC ACTIVITY

Structure

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Economic Activity
 - 2.2.1 Meaning
 - 2.2.2 Scarce Resource Criterion
 - 2.2.3 Price Criterion
 - 2.2.4 Modified Criterion
- 2.3 Classification of Economic Activities
- 2.4 Production
 - 2.4.1 General Meaning
 - 2.4.2 Economic Meaning
 - 2.4.3 Comprehensive Production Concept
 - 2.4.4 Other Concepts of Production
 - 2.4.5 Restricted Material Production Concept
 - 2.4.6 Restricted Market Production Concept
- 2.5 Consumption
- 2.6 Investment
 - 2.6.1 What Is Investment?
 - 2.6.2 Measures of Investment
 - 2.6.3 Gross Versus Net Investment
- 2.7 Relation Between Production, Consumption and Investment
- 2.8 Transactor Groups
- 2.9 Circular Flow of Economic Activities
- 2.10 Income Generation
- 2.11 Let Us Sum Up
- 2.12 Key Words
- 2.13 Some Useful Books
- 2.14 Answers or Hints to Check Your Progress Exercises

2.0 OBJECTIVES

This unit aims at familiarising you with the nature of the flow of different economic items among different economic actors. The basic scheme of this flow of economic activity is called 'circular flow'. This unit explains why it is so described. After going through this unit you would be able to:

- state the meaning of economic activity;
- explain different concepts of production;
- describe consumption activity;

- explain the meaning and different concepts of investment;
- discuss the relation between production, consumption and investment;
- describe the circular flow of economic activities among the different transactors.

2.1 INTRODUCTION

Income is the desired outcome of any production. Income represents command over goods and services. The motivating force behind seeking income is satisfaction of wants. Expenditure on satisfaction of wants is called consumption expenditure and the activity of satisfying wants is called 'consumption activity'. Consumption is required first for keeping us alive and then for making our lives better. Wants are never ending and multiply faster when there is prospect of higher income. The prospect of higher income comes from investment. The desire for higher consumption levels induces investment. Investment in turn leads to more production. Thus production, consumption and investment influence each other in a circular manner, one influencing the others. The aim of this unit is to bring out this circular relationship among different economic activities and identify the income generating flows arising out of this relationship.

2.2 ECONOMIC ACTIVITY

2.2.1 Meaning

What is an economic activity? It is simply income earning activity? Is it only production activity? In common parlance this may probably be the only meaning attached to economic activity. But what is the motive force behind earning income or production? Is it the spending of income or using of what is produced? There is no use of producing something if no one is going to use it. As earning and spending of income or production and use of production, are simply two sides of the same coin, both are economic activities. Although in the narrow sense an economic activity may be taken to mean only production activity, in the broader sense it is taken to mean both production and *use* of that production. Consumption and investment are the two possible uses of what is produced. So in the broad sense production, consumption and investment are all economic activities. Before we explain these forms of economic activity let us see what distinguishes economic activity from non-economic activity. In other words what are the criteria for calling an activity as economic activity?

2.2.2 Scarce-Resource Criterion

There are many things that are essential for living; not only essential but absolutely indispensable like air and sunshine. Do we have to pay any price for these? No, we do not have to pay any price for air and sunshine, because these are available to us in plenty from nature. The natural resources, which produce air and sunshine, are not scarce. We can conveniently call such resources as non-economic because these resources do not command any price in the market. As such any production, like that of air and sunshine, from these resources can be called non-economic production and the activity of these

resources as non-economic activity. Thus any good or service resulting from non-economic resources is not economic activity.

Does it, by implication, mean that production activity resulting from scarce or economic resources is economic activity? As we will see just a little later, it need not necessarily be so. Let us first see what a scarce or economic resource is. Take, for example, land. We produce crops on land with the help of labour and capital equipment like tractor, water pumps, etc. The crops thus produced command a price in the market. Here land, labour and capital are economic resources and the production activity by using these resources is economic activity.

2.2.3 Price Criterion

There are certain activities that result from the use of scarce resources and yet do not command any price in the market. For example, morning walks, physical exercise, sports, hobbies, etc result from a scarce resource labour and yet these activities do not command any price in the market. These activities are non-economic activities. This gives us an additional criterion for treating any activity as economic activity. Scarce resource criterion was the first criterion. The second criterion now is that the good or service resulting from the activity must command a price in the market. We can call it the price criterion.

2.2.4 Modified Criterion

When we come to actually assigning a price the price criteria is needed to be modified. Commanding a price is one thing but actually assigning a price is another thing. A product may command a price yet it may be difficult to assign a meaningful price to it, many a time. Take, for example, a good number of household jobs family members do like cooking, cleaning, washing, looking after children, guiding children in studies, taking care of the sick, polishing shoes, shaving, ironing clothes, looking after the aged and so on. All of us do such types of jobs in our families. Most of these jobs can be got done from the market or by employing domestic servants, tutors, nurses, washer-men, etc. If we get these jobs done from the market we have to pay a price. If we do these jobs ourselves we virtually pay price to ourselves. It makes all households virtual economic jobs because we use our scarce time and resources to do these jobs. If we do these jobs for others we can get a price for the same. But when it comes to assigning monetary values to these self-consumed output producing jobs, statistical problems creep in for the estimators. There are millions of households in a country like India doing these jobs. How to get data about how many have done and how much work has been done during the year. How to know that with what amount of affection, love and profession this work has been performed. Some family members help each other out of sheer love and affection. Some do so out of social compulsion or out of fear of elders. Some are busy throughout the day like housewives and some are busy only part of the day. The crux is that it is extremely difficult for the estimators to get information about the quantity of work done or time devoted to these jobs, not to mention the quality of work. Forced by the lack of data, estimators have no option but to leave out this activity from the scope of valuation of economic activity in the national accounting.

We have seen above that though the self-consumed household jobs command

Circular Flow of Economic Activity

a price yet it is extremely difficult to assign monetary values to these jobs. Conceptually, these jobs must be a part of economic activity but left out from its scope due to the difficulties of measurement. So, in practical estimates the criteria "command a price" is modified to criteria "has a price or is capable of being assigned a price". As such, all activities which may command a price but are not capable of being assigned a price are left out. The modified criterion virtually classifies economic activities into 'measurable' and 'non-measurable' and includes only measurable activities in its scope. This is the criteria used in practical estimates in India.

To conclude, in practice, for any activity to be classified as economic activity, it has necessarily to pass two tests: (i) The activity results from the use of scarce resources; (ii) the output of the activity is capable of being assigned a price. In other words, a non-economic activity is one which does not involve scarce resources or is not capable of being assigned a price.

Check	Vour	Progress	1
CHUCK	1 VUI	11021633	_

1)	State the meaning of an economic activity.
2)	State the two criteria of economic activity.
3)	Explain briefly the modified criterion of economic activity used in practice.

2.3 CLASSIFICATION OF ECONOMIC ACTIVITIES

We have seen in Section 2.2 that production activity is not the only economic activity. Production will be of no use unless there are buyers for what is produced. Goods and services are purchased either for satisfaction of wants or to be used for producing more goods and services. Purchases made for satisfaction of wants are consumption purchases. Purchases for producing more goods and services are investment purchases. The activities associated with these two purchases are called consumption and investment activities,

respectively. Like production these are also economic activities. The basic economic activities are thus broadly classified into

- 1) Production
- 2) Consumption
- 3) Investment

2.4 PRODUCTION

2.4.1 General Meaning

In general terms, any activity leading to creation of utility can be defined as production activity. Farming is a production activity because it produces useful crops with the use of land, seeds, fertilisers, water and output inputs. Manufacturing is a production activity because it converts raw materials into useful products. Banking is a production activity because it provides borrowing and lending services to the people. Cold storages provide storing services by keeping fruits, vegetables, etc. fresh for a long period. Transporters create utility by transporting goods to places where they are needed. Education institutions produce educational services. A place of worship produces religious services. This is the general meaning of production.

2.4.2 Economic Meaning

The concept of production when defined as an economic activity is somewhat narrowed down. It is deemed to be a process concerned with creation of utilities having economic values. The general meaning, as stated above, was concerned with creation of utilities only and was not specific whether these utilities have economic values or not. The economic meaning confined itself only to production which is capable of being translated into value terms. The production which cannot be expressed in value is treated as non-economic production.

2.4.3 Comprehensive Production Concept

Paul Studenski, a famous national income economist, has suggested the following four criteria for treating a particular good or service as a part of economic production. The concept so defined is called **Comprehensive Production Concept**.

i) It is created by human labour and capital

It means that the good or service must involve the use of one or more scarce resources. A scarce resource is one which commands a price in the market. By this test air, sunshine and even water to the extent it does not require further processing are not part of economic production.

ii) It is capable of satisfying human wants

The satisfaction may be direct or indirect. It is direct when a good or service is used directly for consumption. It is indirect when a good or service is used as a producer good for producing more goods and services. In other words, the good or service must be useful for consumption or for production.

iii) It is comparatively scarce and need to be economised

It means that the good or service has some economic value and a choice has to

be made in its distribution to the users. It further implies that the good or services are not available in so much abundance that everybody can get any quantity one likes. For example, air and sunshine are available in abundance and therefore there is no need to make any choice between the uses.

iv) It has a price, real or imputed

A good or services has a price when it is bought and sold in the market. It is clearly a part of economic production. But there are many goods and services which are not sold but either supplied free or self consumed. For example, many government services are supplied free to the people. These services are included in economic production by taking the cost incurred on producing these services as their monetary value. Take another example of housing services flowing from owner occupied houses. These services are self-consumed. The value of these services can be imputed on the basis of rental value of similar rented housed in the neighbourhood.

This criterion will not include in economic production those free or self-consumed products which cannot be assigned any monetary value. The free services which family members render to each other, to neighbours, to friends, to relatives, etc. come in this category because these cannot be assigned any monetary value. One of the and the stronger reason, is the lack of data. These free services are rendered in every family and there are millions of families in India. How to obtain data is the problem? Another, and comparatively less strong reason, is the absence of parallel market for many of these services. As such there is no option but to leave out services from the scope of economic production.

Most of the free or self-consumed services, though likely to pass the first three criterion, may fail to fulfil the fourth criterion. This is why even though it is conceptually warranted to include the free and self-consumed services provided by family members yet left out from the scope of economic production due to statistical problems.

2.4.4 Other Concepts of Production

We have explained above what Studenski has termed as **Comprehensive Production Concept**. Why is this concept called comprehensive will become clear when we study two other concepts delimiting the scope of production in a rather different way. These two concepts are: **Restricted Material Production Concept** and **Restricted Market Production Concept**.

2.4.5 Restricted Material Production Concept

The concept was given by Adam Smith, who wrote in the 18th century, and is widely regarded as the father of modern economics. According to this concept, only *saleable* material goods and services, that is, goods and services that can be potentially sold in the market, that help to complete the utility of these material goods into potential exchange value constitute production. By implication, those services that are connected with production of material goods are not to be treated as production. On the basis of this criterion most government services, advertising and marketing services, services of educational institutions, etc. not connected directly with material production are left out. Later on, Karl Marx also defined production more or less in the

same way as Adam Smith had. Since socialist countries followed the political and economic ideology of Karl Marx, the **Restricted Material Production Concept** became population as the socialist concept of production.

The concept is criticized on the ground that it is narrow and measures only a portion of the true production of the country when applied to the measurement of national income. It also makes the comparison difficult with a country which has adopted a wider concept.

2.4.6 Restricted Market Production Concept

According to this concept production constitutes of only those products that pass through the market and whose value is determined by the free interplay of the forces of demand and supply. This is based on marketability criterion. It will exclude services of government, non-profit institutions serving households and similar services for which no parallel market exists and to which it is not possible to assign any objective value. This concept found little acceptance in practice nearly on the same grounds as the Restricted Material Concept. If adopted, it will also lead to understatement of production and national income.

Now it must be clear that why the Comprehensive Production Concept is called *comprehensive*. It is called so because it includes both material and non-material production and both marketed and non-marketed production in its scope. This concept is adopted, may be with slight degree of variations, by the market oriented countries and is sometimes popularly termed as capitalist concept of production.

2.5 CONSUMPTION

Meaning

Consumption refers to an activity leading to satisfaction of wants. All goods and services acquired with the intention of satisfying wants are classified as consumer goods and services. The expenditure incurred on these goods and services is called consumption expenditure. It is not the nature of the good but the use of the goods that determines whether a good or a service is a consumer good or not. Bread purchased by a household is acquired for satisfaction of hunger and therefore it is a purchase for consumption good. Bread purchased by a restaurant is acquired to produce other goods and, therefore, not a consumer good but a producer good. Service of an electrician rendered to a household are consumer services while those rendered to a factory are producer services.

Sources of Consumption Expenditure

There are three sources of consumption expenditure in a country. One source is households or individuals who acquire goods and services for satisfaction of wants of family members. Another is Non-Profit Institutions Serving Households who provide free services to households on collective basis. Some examples of such institutions are found in private charitable societies running schools, dispensaries, places of worship, community associations, trade unions, and so on. The third source is general government which runs the administration of the country on behalf of the people and spends on goods and services for meeting collective wants of the people. Such expenditure is on police, courts, military, maintenance of public properties, sanitation, charitable hospitals,

schools, colleges, training institutions and many more such items. The sum total of consumption expenditure in the country is taken as the sum of such expenditure incurred by households, non-profit institutions serving households and general government.

Single-Use Versus Durable-Use Consumer Goods and Services

The goods and services used for consumption are classified into single-use and durable use. Their meaning is clear by their name. Goods and services which are used only once and loose their identify after that are called **single-use** goods like food items. Goods which are used again and again are **durable-use** goods like clothes we wear, shoes, furniture, electrical gadgets, books, TV sets, audio sets.

We have pointed out the distinction between single-use and durable use because failure to so distinguish can create problems in estimation of consumption expenditure. Single-use goods do not create much of a problem because most of these are perishable goods and likely to be used for consumption in the year in which they are purchased. Durable use goods create accounting problems. Take, for example, an item of furniture bought in a particular year by a household. This item of furniture will actually be used for a number of years. So expenditure on this must also be spread over the number of years. If this costs Rs.500 and its useful life is 5 years, the consumption expenditure in a particular year should amount to only Rs.100. What is true about the item of furniture is true about many items like TV set, cars, transistors, books, expensive clothes etc. These items create problems in estimation of consumption expenditure. The estimators account the whole of such expenditure in the year in which the durable use goods were purchased. It is because it is difficult to obtain data about the quantity, quality, life etc. about such goods. As such durable use goods deemed to be consumed in the year of purchase.

2.6 INVESTMENT

2.6.1 What is Investment?

The term 'investment activity', as used in economics, and in the level of the aggregate economy, is capital formation: Any addition to capital assets during a year is termed as investment. Capital assets as we are using here denote the produced means of production, that is, capital goods and not in the sense of financial assets like shares, debentures etc. Capital assets of a production unit are of two types: (a) Fixed Capital Assets, and (b) Inventory or stocks of materials and goods. The main examples of fixed capital assets are building, machines, furniture, transport vehicles and other permanent fixtures. Inventory includes stocks of raw materials, semi-finished goods and finished goods. Expenditure on making addition to these assets in a year is termed investment expenditure or simply investment.

Investment, i.e. additions to capital assets, may be deliberate or just a matter of 'no option'. Investment in fixed asset is mostly deliberate and planned. But investment in stocks may partly be deliberate and partly a matter of compulsion. Every production unit has to keep a certain minimum amount of materials and goods as a matter of convenience. But sometimes a production unit is not able to sell whole of the output produced during the year. Its unsold output becomes

a part of closing stock of the year which is treated as investment. Thus both planned and unplanned addition to capital assets during a year is investment. This is true about both a production unit and the country as a whole.

2.6.2 Measures of Investment

Investment at macro level can be measured in two alternatives ways. One way is to treat the excess of production over consumption as investment. In other words, the part of country's production which is not acquired for consumption is investment, or

Investment = Production – Consumption

Alternatively, investment is measured as the addition made to the total stock of capital in a country during the year. Capital refers to the stock of capital goods that exits at the beginning of the year. Investment is the net addition made to this during the year. Suppose for illustration, that capital stock at the beginning of the year 2005 i.e. on 1.1.2005 is Rs.1000 crores. Suppose at the end of the year i.e. on 31.12.2005 capital stock is Rs.1100 crores. This addition of Rs.100 crores of capital assets during the year is investment.

Investment = Capital stock at the end of the year – Capital stock at the beginning of the year

= 1100 crores - 1000 crores

= Rs.100 crores

2.6.3 Gross Versus Net Investment

A fixed capital asset has a limited life. It depreciates every year and is to be replaced when its life is over. The normal wear and tear of fixed capital assets during the year is termed as 'consumption of fixed capital' or 'depreciation'. This reduces the amount of effective capital stock in the country. Addition of new capital goods during the year is investment. In fact it is called gross investment. It is called gross because the reduction in capital stock on account of consumption of fixed capital or depreciation has not been deducted from the new addition. By deducting consumption of fixed capital from gross investment we get a measure of net investment. Thus gross investment is a measure of 'new addition' while net investment is a measure of 'net addition' of capital goods.

Net Investment = Gross investment – Consumption of fixed capital

The above statement is based on the assumption that there is no loss of fixed capital assets on account of unforeseen factors like fire, earthquake, floods, change in government policy, change in tastes, etc. The loss of fixed capital on account of these factors is termed as 'capital loss' and not consumption of fixed capital. If there is such capital loss during the year the actual net investment may be lower.

2.7 RELATION BETWEEN PRODUCTION, CONSUMPTION AND INVESTMENT

The basic economic activities are related to each other in two ways. First, if we know the amount of any two of these we can find out the amount of third

Circular Flow of Economic Activity

activity. Suppose we are told that the amount of production is Rs.100 crores and the amount of consumption is Rs.80 crores. By subtracting consumption (Rs.80 crores) from production (Rs.100 crores) we get investment (100-80 = Rs.20 crores) . So

Production = Consumption + Investment

Consumption = Production - Investment

Investment = Production - Consumption

Second, the three activities influence each other. More production means possibility of more consumption and more investment. Given production if there is more of consumption there would be less of investment, or, more investment means less of consumption.

More investment leads to more production which in turn makes possible more consumption and investment. More investment in turn may lead to more production and leads to cumulative effects.

More consumption may encourage more investment and consequently more production. More production which in turn may lead to further increase in consumption and investment.

Check Your Progress 2

1)	Give economic meaning of production.
2)	State the four criteria of comprehensive production concept.
3)	Given two alternative measures of investment.

2.8 TRANSACTOR GROUPS

Transactors performing economic activities are usually grouped into the following:

- 1) Production units
- 2) Consumer households.
- 3) Non-profit institutions serving households
- 4) General government
- 5) Rest of the world.

Let us see what these groups are and what economic activities they perform.

i) **Production Units**

A production unit comes into existence when the owners of the four factors of production join hands to produce a good or a service. Land, labour, capital and entrepreneurship are the four factors of production. The entrepreneur takes the initiative in organising a production unit. He hires the services of other three factors of production. In both business accounting and national income accounting production unit is treated a separate entity from its owners. As such in accounting practices, it is the production unit which is assumed to be hiring the services of all factors of production including the entrepreneurship. The entrepreneur is the owner of the business and yet, he is treated as the 'hired rather than the hirer'. The separate entity of the production unit is maintained throughout the study of national income accounting.

Production unit include all units in a country whether owned by residents or non-residents, producing goods or services, small or large, organised or unorganised, private owned or government owned, producing for selling in the market or for self-consumption or free distribution. In this way the scope of production units is comprehensively defined.

There are two main functions of production units. First, these hire factor services and produce goods and services. Second, the income so created in the process of production is distributed among the owners of the factors of production. Such payments are called 'factor payments' or 'factor cost'. When looked at from the angle of owners of factors, these are called 'factor incomes'.

ii) Consumer Households

Consumer households include individuals and families acquiring goods and services for satisfaction of wants. They are called consumer households because producer households are a part of production units.

Consumer households perform two functions. First, they supply factor services to production units and in turn get factor incomes. Second, they spend these incomes on goods and services produced by production units. Whatever is not spent is considered as saving.

iii) Private Non-Profit Institutions Serving Households (PNPISH)

PNPISH include all private social, religions and other such organisations producing goods and services but supplying the same free or at a price which is much below the cost incurred. Some examples are charitable hospitals, charitable schools, temples, churches, mosques, gurudwaras, neighbourhood association, etc. These are called 'non-profit' because their ostensible intention is not to sell what they produce and earn a profit but to serve people. The cost

incurred on providing free services by these institutions is taken as consumption expenditure.

iv) General Government

General Government includes all government departments at all levels, central, state or local, producing and supplying free services to the people. It fulfils the collective wants of the people like that of law and other. Justice, defence, education, medical treatment, sanitation, water supply, roads, etc. To fulfil these collective wants government departments spend on police, courts, military schools, hospitals etc. For this purpose general government buys goods and services from production units. The expenditure incurred on providing free services to people is termed as government consumption expenditure. To finance its expenditure government imposes taxes on production units and households. It may also have other sources of finance. Government may also give subsidies to production units.

The prefix 'general' in general government' signifies that we are taking government as a consumer only. Government as owner of production units is treated as part of production unit sector.

v) Rest of the World

It includes all non-residents, that is, outsiders, engaged in economic transactions with residents of a nation. Exports and imports are the main transactions with earning and spending of income. Production units sell exports to and buy imports from the rest of the world. In national income accounting all exports and imports are routed through the production units sector.

2.9 CIRCULAR FLOW OF ECONOMIC ACTIVITIES

The main focus in national income accounting is on production units because national income is created in these units. All the angles of looking at the flow of national income either originate from or terminate at production units. Each transactor group, including production units, has a two-way economic relationship with production units (PUs). The two way-relationship is in terms of buying and selling or payments and receipts arising out of production activity.

Each sector has a two way economic relationship with PUs. Each sector, including PU, receives from and pays to PU. These relationships are summarised as follows:

- 1) PU receives payment for materials, services and capital good sold to PU. Sales of materials and services to PU are called sales of 'intermediate products'. Sales of capital goods are the sales of investment goods.
- 2) PU makes payments for purchases of materials, services and capital goods purchased from PU. Purchases of materials and services from PU is termed intermediate costs. Purchases of capital goods is termed as capital formation or investment.
- 3) PU pays to household (HH) for the factor services. These payments are in the form of wages, rent, interest and profits and called factor costs. From the angle of HH these are factor incomes.

- 4) PU receives payments from HH for the goods and services sold. It is households' consumption expenditure.
- 5) PU receives payments from NPISH for the goods and services sold. It is consumption expenditure of NPISH.
- 6) PU pays production taxes to general government. These taxes are in the form of excise duty, sales tax, custom, octroi, license fees, etc. All such taxes on production are called indirect taxes.
- 7) PU receives payments from general government (GG) on two counts. It receives payments from GG for the goods and services sold. For GG it is government's consumption expenditure. Second, PU receives subsidies from GG. The subsidy is given to induce the PU to sell particular products at a price lower than cost or lower than what is warranted by market conditions.
- 8) PU receives payments from the Rest of the World (RW) for the goods and services sold to the RW. These are exports of the PU.
- 9) PU makes payment to the RW for the goods and services bought. These are imports of the PU.

2.10 INCOME GENERATION

The flows described above are income generated flows affecting income generation, one way or the other. The full relevance of these flows would be clear in Unit-4 where methods of measurement of national income are explained. Here we will describe their relevance in brief.

There are three angle of looking at the flow of national income. These are production, income distribution and expenditure angles. All the flows of payments except subsidies into production units represent payment for the output sold by the production units. These flows are helpful in measuring the value of output produced by production units and, therefore, relevant in production angle.

From amongst the flows out of production units the flows of factor payments represent income distribution activity of production units. These flows form the basis of the income distribution angle.

Expenditure angle is simply the other side of coin of the production angle. The expenditure angle looks at the output from the buyer's angle while the production angle looks at it from the seller's angle. All the flows of payments to production units are expenditures for different sectors and sales for the production units.

Check Your Progress 3

l)	Name the three consumer transactor groups in a country.		

- 2) Choose the correct alternative.
 - A) The main focus in national income accounting is on:
 - a) Production units
 - b) Consuming units
 - c) Investing units
 - d) None of the above.
 - B) Flows of factor payments form the basis of the following angle of looking at national income
 - a) Production angle
 - b) Income distribution angle
 - c) Expenditure angle
 - d) All the above three angles
 - C) Factor services are rendered by:
 - a) General government
 - b) Non-profit institutions serving households
 - c) Households
 - d) Production units

2.11 LET US SUM UP

For any activity to be classified as economic activity it is necessary to pass two tests: (1) The activity results from the use of scarce resources and (2) output of the activity is capable of being assigned a price. There are three basic economic activities: that of production, consumption and investment. Production is deemed to be a process concerned with creation of utilities having economic values. There are three concepts of production: (1) Comprehensive (2) Restricted material and (3) Restricted market. Comprehensive production concept is based on four criteria: A good or service must be (a) created by human labour and capital, (b) capable of satisfying human wants, (c) comparatively scarce and need to be economised, and (d) has a definite monetary price of cost or can be given one by imputation. Restricted material concept includes only saleable material goods and the services that helps to complete the utility of these material goods. Restricted market concept includes only those products that pass through the market and whose value is determined by free interplay of the forces of demand and supply. Comprehensive **Production** concept and **Restricted Material** concept are used respectively in capitalist and socialist countries.

Consumption activity is the activity leading to the satisfaction of wants. There are three sources of consumption expenditure in a country: (a) Households (b) Private non-profit institutions servicing households, and (c) General government. Goods used for consumption are classified into single use and durable use goods. Single use goods are used in a single act. Durable use goods are used again and again. In accounting durable use goods are taken to be consumed in the year of purchase.

Addition to the stock of capital goods during a year is called investment. It also equals to excess of production over consumption. Gross investment is

measured without taking into account consumption of fixed capital. By deducting consumption of fixed capital from gross investment we get net investment.

Production, consumption and investment are related in two ways. First, since production equals consumption plus investment, therefore, if we know any two of these we can get the values of the third. Second, the three activities influence each other. For example, more production may mean more consumption and investment.

Transactors performing economic activities are broadly classified into: (1) Production Units, (2) Consumer Households, (3) Private non-profit institutions serving households, (4) General government and (5) Rest of the world. The main focus in national income accounting is on production units because all the angles of looking at the flow of national income either originate from or terminate at production units. The economic activities flows among these transactors are income generating flows. National income from different angles can be calculated from these flows.

2.12 KEY WORDS

Consumption : Using up of goods and services for satisfaction

of wants.

Investment: The act of adding to the stock of capital.

Non-profit Institutions : Production units producing services supplied

either free or at a price having no relation with

cost.

Production : A process concerned with creation of utilities

having economic values.

Production unit : A unit of production formed when the owners

of factors of production join hands to produce a

commodity.

2.13 SOME USEFUL BOOKS

Abraham, W.I. (1969), *National Income and Economic Accounting*, Prentice Hall, New Jersey.

Agarwala, S.K. (1998), *National Income Accounting*, Bookland Publishers, Delhi.

Beckerman, W. (1976), An Introduction to National Income Analysis, Macmillan, London.

Hicks, J.R. (1971), The Social Framework, Oxford University Press, Delhi.

Hicks, J.R. Mukerjee M. and Ghosh, Shyamal K. (1984), *The Framework of the Indian Economy*, Oxford University Press, Delhi.

Ruggles, R and Ruggles, N.D. (1956), *National Income Accounts and Income Analysis*, Mcgraw Hill, New York.

Studenski, Paul (1958), *The Income of Nations*, Part-II, New York University Press, New York.

2.14 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) Any activity concerned with production and use of production for consumption and investment is an economic activity.
- 2) The two criteria are: (a) Good or service must be produced by scarce resources and (b) goods or services must command a price in the market.
- 3) The modified criterion is that (a) the activity results from the use of scarce resources and (b) the output of activity is capable of being assigned a price.

Check Your Progress 2

- 1) Production is a process concerned with creation of utilities having economic values.
- 2) The goods or services is (a) created by human labour and capital, (b) capable of satisfying human wants, (c) comparatively scarce and need to be economised and (d) either has a definite monetary price or cost or can be given one by imputation.
- 3) a) Excess of production over consumption.
 - b) Addition made to total capital stock of a country during a year.

Check Your Progress 3

- (a) Households (b) Private non-profit institutions serving households and
 (c) general government
- 2) a) Production units
 - b) Income distribution angle
 - c) Households.