CHAPTER - 7

NATIONAL INCOME

INTRODUCTION:

National income is the sum of the income of all individuals in a certain period of time or one fiscal year. Individuals income mainly defines as money value of his/her earning from productive activities, currently rendering by his /her properties. This definition links income to the production. Thus the national income is the money value of goods or services produced in an economy in a period of time.

According to the Marshall, *"The labor and capital of a country acting upon its natural resources, produce annually a certain net aggregate of commodities, material an immaterial, including services of all kinds. This is the true net annual income or revenue of a country or the national dividend."*

According to Pigou, *"National dividend is that part of the objective income of the community including, of course, income derived from abroad, which can be measured in money."*

According to Fisher, *"The national income consists solely of services as received by ultimate consumers, whether from their material or from their human environment."*

According to Simon Kuznet, *"National income is the net output of commodities and services flowing during the year from the country's productive system in the hand of the ultimate consumers."*

NATIONAL INCOME ACCOUNTING:

It is a record or account of the production of goods and services with their monetized values within a given period of time generally a year. So national income accounting is a system where we measure the total final goods and services and their monetary values in a year.

VARIOUS CONCEPTS OF NATIONAL INCOME ACCOUNTING

1. **Gross Domestic Product (GDP):**

GDP is the total monetary value of all the final goods and services produced within a country in a specific period of time generally one year. So in GDP we include only:

- ☑ The final goods and services and we don't include intermediate goods and services.
- ☑ Their monetary value and the goods and services.
- ☑ The goods and services produced within the country and it is not cared whoever is producing either the producer is citizen of the country or not.
- ☑ The goods and services within the specified time and we don't count the goods and services that are produced in previous years.

By using expenditure form, it can be shown as:

- ➢ ***GDP = C + I + G + (X - M)*** Where,

- C = consumption expenditure
- I = Investment expenditure
- G = Government expenditure
- X = Total export earnings
- M = Total import expenses and
- X - M= Net income from abroad.

2. **Gross National Product (GNP):**

GNP is the monetary value of all the final goods and services produced by the all the factors of production of a nation within a country or abroad in a given period of time generally one year. So to calculate GNP, we add the total factor income earn from foreign countries by the domestic citizen and subtract the total factor income earned by the foreigner in the country to GDP.

- ***GNP = GDP + NIFA*** Where,
- NFIA = Net factor income from abroad, or
- NFIA = Total income received by domestic factor of production from abroad – total income taken by foreign factor of production from the country.

3. **Net National Product (NNP):**

In the production process, certain amount fixed capital is used up. This is called depreciation of fixed capital or capital consumption allowances (CCA). By deducting the value of depreciation from the value of GNP in a year, we get another measure of output called Net National Product.

Hence, ***NNP = GNP - CCA*** (depreciation)

4. **National Income (NI):**

National income is aggregate income of all the factors of production within the country in one year. The amount earned by the factors of production such as land, labor, capital and organization for a period of one year is known as national income. So, national income can be given as: ***NI = R + W + I + P*** Where,

- R = Aggregate Rent
- W = Aggregate Wage
- I = Aggregate Interest Income
- P = Aggregate Profit

In other words, national income can be expressed as,

- ***NI= NNP - Indirect taxes + subsidies***

5. **Personal Income (PI):**

Personal income is the sum of all incomes actually received by all individuals or households during a given year.

- ***PI = NI - Undistributed Corporate Profit-Profit Tax-Social Security Contribution + Transfer Payments.***

6. **<u>Disposable Income (DI):</u>**

The entire amount received by the individuals and households are not available for consumption expenditure because some part of the personal income should be paid to the government in the form of direct tax. Hence, the income remained after paying direct taxes from personal income is called disposable income.

- ***DI = PI - Direct Taxes.***

Methods of Measurement of National Income:

National income measures the income generated by a country through the production activities that are carried out within a country during a specific period of time.

A circular flow of income and expenditure exists within an economy, where factor income is earned from the production of goods and services, and the income is spent on the purchase of produced goods. Thus, there are three alternative methods of computing national income. This includes:

1. Product/ Value Added Method:

Under this method, national income is calculated at the stage of production of goods and services during a year. There may be some chances of double calculation for same product, when the calculation is done from the different stage of production. The product method includes the following two methods to avoid the double calculation problem:

A. **<u>Final Product Method:</u>**

To measure the national income from final product method, an economy is divided into different productive sectors like primary sectors (agriculture), secondary sectors (industry) and tertiary sectors (service). Finally, National Income is calculated by adding the market value of all the goods and services produced in primary, secondary and tertiary sectors.

The components of final product method are as follows:

i. **Primary Sectors:** Agriculture is the primary sector. It includes various types of agro products like vegetables, fruits, crops, etc.
ii. **Secondary Sectors:** Industrial sector is kept in the secondary category. It includes activities of manufacturing and construction like food processing, iron and steel production, electricity, water supply, etc.
iii. **Tertiary sectors:** Service sector is included in the tertiary sector. It includes banking, insurance, transport and communication, trade and commerce, etc.

The calculation of national income by product method is presented in table with hypothetical data:

Production Sector	Value of Product (in million)
Primary Sector	10000
Secondary Sector	7000
Tertiary Sector	8000
Gross Domestic Product	25000

Net factor income	-5000
Gross National Product (GNP) Depreciation	20000 -1000
Net National Income (NNI) Indirect taxes Subsidies	19000 -1000 +2000
National Income	**20000**

The calculation of National Income by product method includes various sectors like primary, secondary, tertiary and other production sectors which are measured in terms of million and calculated to get the national income.

B. Value Added Method:

Under the value-added method, National Income is calculated by adding the value added amount in each stage of production. All the goods and services are produced being different stages of production. National Income is the sum of the value added by different stages of producers in a country during the period of a year. We use the following formula to calculate the value added.

- Value added = Sales value of output - Cost of intermediate goods

The calculation of National Income by value-added method is presented below:

Production Stage	Value of Output	Cost of Intermediate	Value Added
Wheat (farmer)	20	0	20
Flour (flour mill)	50	20	30
Bread (baker)	70	50	20
Traders	80	70	10
Total	**220**	**140**	**80**

In the table, that there are four stages of production. A farmer produces wheat at equal to the value of Rs. 20. Hence, Rs. 20 is the value added to the economy. Flour mill grinds the wheat and sells flour to the bakery at Rs. 50. Hence, the value added to the economy by the flour mill is Rs. 50 and the net income added is Rs. 30 (50 - 20). Similarly, the baker sells bread to the traders at Rs. 70. Finally, the traders sell to the final consumers at Rs. 80 and the net added is Rs. 10 (80 - 70). Hence the sum of value added at each stage of the production is the final value and the final value is added to the National Income consumption

2. Income/Factor income Method:

Income method measures the national income by adding all the incomes received by the owners of the factors of production in a year. Business organization uses various factors of production like land, labor, capital, organization, raw materials, etc. to produce goods and services. The users of such resources make the payment of factors of production in the form of rent, wages, interest, profit, payments for raw materials. So, National income is the sum of incomes received by all these factors of production in a year.

The income approach includes the following components:

a. **Wages and Salaries:** It includes the wage and salary received by the employees during the year. It even includes the benefits as tips, bonus, etc.

b. **Rent:** Rent includes the rent of land, houses, factories, machinery, apartments, etc.
c. **Interest**: It is the additional amount paid by the borrower to the lender of capital. It includes interest received.
d. **Corporate Profits**: It consists of corporate profits with inventory valuation and capital consumption adjustments.
e. **Indirect taxes**: The income generated from indirect taxes like VAT, sales, tax, excise duty are also included in national income.
f. **Net exports earnings**: It is the difference between export earnings and import expenses of goods and services.

The calculation of national income by income approach is presented in by the hypothetical table.

Income heading	**Amount of Income**
Wages and Salaries	5000
Rent	2000
Interest	3000
Corporate Profit	5000
Indirect taxes	1000
Gross Domestic Income (GDI) Net factor income from abroad	16000 -1000
Gross National Income (GNI) Depreciation	15000 -500
Net National Income (NNI) Indirect taxes Subsidies	14500 -500 1000
National Income	**15000**

From the above table, we get that wages and salaries are 5,000 million and rent is 2,000 million respectively. So like this way we get the different distribution of national income among the different class of people.

3. Expenditure Method:

Another method for the measurement of national income is expenditure method. Under this method, national income is calculated by adding the expenditure made by all the individuals or sectors of an economy. In an open economy, the demand for domestic output is made up of four components. It includes consumption expenditure made by household sector (C), investment expenditure made by household sector (I), government expenditure on goods and services (G) and net foreign export (X - M)

Under expenditure method, we calculate the GDP by using formula,

- GDP = C + I + G + (X - M)

The components of expenditure method are as follows:

a. Consumption Expenditure (C):

Consumption is the major activities of the household sector. They consume different types of goods and services like basic goods (e.g. food, clothes, shelter), luxurious goods (e.g. gold, diamond), durable goods (e.g. TV, refrigerator), non-durable goods (e.g. fruits, vegetables) etc and services.

b. **Private Investment Expenditure (I):**

Investment is the prime responsibility of business sector. They invest a large amount of money in the production of goods and services. For example: they invest in purchasing, raw materials, technology plant and machinery, transportation, etc.

c. **Government Expenditure (G):**

Government invest large amount of money every year for the betterment of citizen (For e.g. government invest to run daily administration, to maintain law and order, infrastructure development like road, education, transport, etc.)

d. **Net- Export (X - M):**

Import and Export are two major components of international trade. The difference between export and import is called net-export. An open economy imports and exports a number of goods and services (like machinery, petroleum product, vehicle, etc.)

The calculation of national income by expenditure method is shown in the following hypothetical table:

Expenditure heading	Expenditure
Consumption expenditure	1000
Investment expenditure	2000
Government expenditure	3000
Net expenditure	- 400
Gross Domestic Expenditure (GDE)	2000
Net income from abroad	1000
Gross National Expenditure (GNE)	3000
Depreciation	- 500
Net national expenditure (NNP)	2500

It is very difficult to collect the data on consumption and investment expenditure of millions of people, business firms and government in the estimation of national income by the expenditure method. Hence, this method is less practical and less useful.

Difficulties in Measurement of National Income:

There are many difficulties in measuring national income in our country accurately. Some of these difficulties involved in the measurement of national income are described below:

1. **Non-Monetary Transaction:**

The first problem in national income accounting relates to the treatment of non-monetary transactions such as the services of housewives to the member of their families teaching their own child, working in own farm, fruits and vegetables produced and consumed by households, etc.

2. **Problem Of Double Counting:**

Only final goods and services are included in the national income accounting. But it is very difficult to distinguish between final goods and intermediate goods. Intermediate goods may be used for final consumption.

3. **Inadequate And Unreliable Statistics:**

Due to lack of required data on various economic activities, national income accounting has become quite a difficult task in developing countries. Even the available has become quite a reliable due to various factors such as geographical condition, etc.

4. **Petty Production:**

There is a large number of petty production and it is difficult to include their production in national income because they do not maintain any account. Family members are engaged in the work and they should not maintain any account.

5. **Transfer Payments:**

Individual gets a pension, unemployment, allowance and interest on public loans, but these payments create difficulty in the measurement of national income.

6. **Environment Damages:**

No nation prepares account related to the depletion of natural resources in terms of mining minerals, the erosion of soil, the pollution of air, water and soil and so on.

7. **Second Hand Transaction:**

The transaction of second-hand goods only changes the ownership. They do not reflect additional production. They are excluded from national income because goods were included in national income when they were newly produced and sold first.

8. **Illiteracy and Ignorance:**

If the majority of people use illiterate and ignorant, they cannot keep the records of production activities accurately. Hence, it is difficult to get the correct information about the production.

9. **No Account:**

Some people do not keep any proper account about their business income, so their income is not included in the national income.

10. **Difficulty in Assessment:**

Some goods and services value cannot be assessed easily. For example the value of different Cows and Sheep's is very difficult.

11. **Unpaid Services:**

In national income only those services are included for which the payment is made. The unpaid services are excluded.

12. Direct Exchange:

In the less developing areas people exchange the commodities with the commodities and do not use the money. So the value of these goods cannot be estimated.

13. Income Of Foreign Companies:

The income of foreign investment is not included in the national income. Because these companies send some portion of their profit to their own countries.