Module 1
Lecture #02

Learning Outcomes:
- Understand the concept and measurement of National Income.
- Analyze the trends in National Income in India.
- Examine the structure of National Income by sectors.

Introduction to National Income

It generally refers to the total value of all goods and services produced *within a country* over a specific period, usually a year.

Importance of National Income:
- Indicator of economic health.
- Basis for economic policy formulation.
- Helps in comparing economic performance over time and between countries.

Concepts and Measures of National Income

- **Gross Domestic Product (GDP)**

  It measures the value of final goods and services produced within a geographic boundary regardless of the nationality of the individual or firm.

  For instance, cars manufactured in India by Japanese companies will be included in Indian GDP.

- **Net Domestic Product (NDP)**

  It is the GDP calculated after adjusting the value of 'depreciation'.

  ### NDP = GDP – Depreciation

- **Gross National Product (GNP)**

  It is a measure of the value of output produced by the nationals of a country irrespective of the geographical boundaries.

  ### GNP = GDP + Net Factor Income from Abroad

In India's case, GNP is lower than its GDP as net income from abroad has always been negative in India

● **Net National Product (NNP)**

It is the GNP calculated after adjusting the value of 'depreciation'.

NNP = GNP - Depreciation

Note: NNP is always lesser than GNP (Reason: the Depreciation can never be reduced to zero and will always be positive.)

● **National Income (NI)**

It is a measure of the sum of all factor incomes earned by the citizens of a country (whether within the country or abroad).

National Income at Factor Cost = NNP at Market Price – Indirect Taxes + Subsidies

Important Terminologies

Factor Cost: It refers to the cost of all factors of production used or consumed in producing goods and services.

Factor Cost (FC) = Market Price – Net Indirect Taxes

Where, Net Indirect Taxes (NIT) = Indirect Taxes – Subsidies

Therefore, Factor Cost = Market Price - Indirect Taxes + Subsidies

Market Price: It refers to the actual transacted price of goods and services.

Personal Income (PI): It includes all income (including transfer payments) which is received by all the individuals in a year.

Thus, Personal income is: PI = NI + transfer payments - Corporate retained earnings, income taxes, social security taxes.

[Note: Transfer payments are payments made by the government to individuals for which there is no economic activity produced in return by these individuals. E.g. old age pensions, scholarships etc.]

Disposable Personal Income (DPI): It refers to the amount, which in actual is at the disposal of individuals to spend as they like.

DPI = PI - Personal Taxes.

DPI = Consumption + Savings.

Real GDP: It refers to the current year production of goods and services valued at base year prices. Such base year prices are constant prices.

It is a much better way to calculate the GDP because in a particular year GDP may be bloated up because of high rate of inflation in the economy.

Nominal GDP: It refers to current year production of final goods and services valued at current year prices.

Base Year: Base year is the year used as the beginning or the reference year for constructing an index.

GDP Deflator: It is the ratio of GDP at current prices to GDP at constant prices. GDP deflator is published on a quarterly basis since 1996 with a lag of two months

$$\textbf{GDP deflator = (Nominal GDP/Real GDP) * 100}$$

Goods:

> **Consumption Goods**: Consumption products, often known as final goods, are intended for final consumption. These are not used in the manufacturing of other goods. e.g., a television, a pen, or a pair of shoes.

> **Capital Goods:** are goods used by one business to assist another in the production of consumer goods. e.g. Equipment, machinery, buildings, computers, etc.

> **Final Goods:** in their final form, ready for consumption or use by the end-user, and may include both consumer goods and capital goods.

> **Intermediate Goods:** Intermediate goods are utilized in the production of finished goods or consumer goods.

Methods of Calculating National Income

- **Production (Output) Method**

   Under this method, GDP is calculated at market prices, which is the total value of outputs produced at different stages of production. It focuses on *the supply side* of the product.
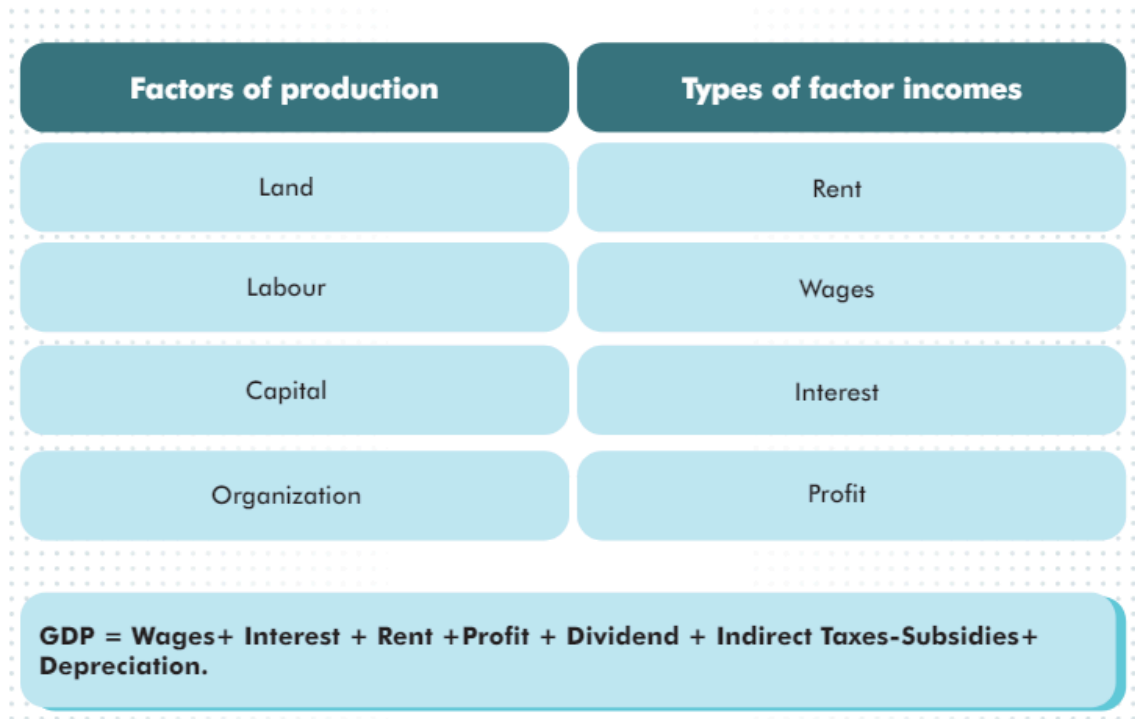
Goods and services included in production	Goods and services not included in production
• Goods and services sold in the market.	• Purchase and sale of Second hand items.
• Goods and services not sold but supplied free of cost.	• Production due to illegal activities.
• Services provided by the agents.	• Non-economic goods such as air and water.
	• Transfer Payments such as scholarships, pensions, etc.

NOTE: Only final Goods and not Intermediate Goods are taken for calculation to avoid **Double Counting.**

- **Income Method**

  This approach focuses on aggregating the payments made by firms to households, called factor payments. It focuses on the demand side of the product.

Factors of production	Types of factor incomes
Land	Rent
Labour	Wages
Capital	Interest
Organization	Profit

GDP = Wages+ Interest + Rent +Profit + Dividend + Indirect Taxes-Subsidies+ Depreciation.

- **Expenditure Method**

  The expenditure method measures the final expenditure on GDP. It is the total spending on currently-produced final goods and services in an economy.

  This final expenditure is made up of the sum of 4 expenditure items, namely:

  Gross Domestic Product (GDP) = C + I + G + (X-IM)

Consumption Expenditure (C)	It is the personal consumption made by households. Payment of which is paid by households directly to the firms.
Investment Expenditure (I)	Investment is an addition to capital stock of an economy in a given time period. It includes investments by firms as well as governments sectors.
Government Expenditure (G)	It includes the value of goods and service purchased by Government.

NOTE: Government expenditure on pension schemes, scholarships, unemployment allowances, etc. are not included as they come under transfer payments.

Imports (IM)	Expenditure on foreign made products (Imports) is expenditure that escapes the system.
Exports (X)	It is the expenditure by other economies on our production (Exports).

Trends in National Income in India

- **Historical Trends**
    - Post-Independence period: Slow growth due to agrarian economy and lack of industrialization.
    - Green Revolution in the 1960s and 1970s: Boost in agricultural productivity.
    - Liberalization in 1991: Acceleration in economic growth.
- **Recent Trends**
    - Growth rates in the 21st century: Average GDP growth of 6-7% per annum.
    - Impact of economic reforms, globalization, and technological advancements.

Structure of National Income by Sectors

- **Agriculture**
    - Share of agriculture in GDP has declined over the years.
    - Contribution to employment remains significant.
    - Trends in agricultural productivity and challenges.

- **Industry**
    - Industrial sector includes manufacturing, mining, construction, and utilities.
    - Growth and structural changes in the industrial sector.
    - Impact of Make in India and other industrial policies

- **Services**
    - Services sector is the largest contributor to GDP.
    - Major components: IT & ITES, banking, trade, transport, communication.
    - Growth drivers and future prospects.

Assignment #02

Analyze recent National Income data from the Economic Survey.