Economic and Social Development: Sustainable Development, Poverty, Inclusion

Short Answers

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New Delhi

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Message from DG (IIPA)

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Surendra Nath Tripathi
Director General, IIPA

INTRODUCTION

'Economic and Social Development' is one of 7 broad themes of CSE (Preliminary) syllabus and covers Sustainable Development, Poverty, Inclusion, Demographics, Social Sector Initiatives, etc. Broadly, the short notes on this theme includes the following:

- **Basic Concepts** of Macroeconomics and Microeconomics
- **Economic Measurements like** National Income & Its estimation– GDP, GNP etc. Economic Growth and Development, Inflation – causes, effects and measurement – CPI, WPI.
- **Money & Banking -** Money - Function & Classification, Banking Structure in India, role of RBI, issues in banking sector like non-performing assets, banking governance etc., Financial Markets & Its Instruments – money market and capital market.
- **Public Finance in India –** Budgeting, Fiscal Policy, Centre-State distribution of revenues, Tax Structure in India – direct and indirect taxes, Goods and Services tax and issues related.
- **Planning -** Meaning, Objectives and history, Strategies – Harrod Domar, Mahalnobis, LPG (Liberalisation, Privatisation and Globalisation)etc., Planning Commission and NITI Aayog, Five Year plans
- **External Sector -** Balance of Payments, Foreign Capital – FDI, FPI, Trade Policy and agreements, Exchange rate, International organisations
- **Economic Sectors –** Agriculture, Industry and Services
- **Inclusive Growth –** Poverty, Unemployment, Sustainable development, Welfare programmes.

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Chapter 1: Basics of Macroeconomics

1. Microeconomics and Macroeconomics

Microeconomics is the study of the economic activity of an economic unit or a part of the economy or a small group of more than one unit. **Macroeconomics** is the branch of economics that deals with the economic aggregates of a country as a whole. Although microeconomics and macroeconomics are two different aspects of economics, they are not mutually exclusive.

The concepts of microeconomics and macroeconomics are very important for the UPSC IAS Exam. In this article, let us see what microeconomics and macroeconomics are and the differences between them.

1.1 What is Microeconomics?

Microeconomics is concerned with the decisions made by individuals and businesses in response to the shifting cost of products and services in an economy. Microeconomics encompasses a variety of subjects, including

- The **Supply and Demand** of items in different markets.
- Consumer behaviour, either individually or collectively.
- Individual labour markets, demand, and determinants such as an employee's wage are all factors that influence service and labour demand.

One of the most distinguishing characteristics of microeconomics is that it focuses on casual scenarios in which a marketplace's present conditions alter. To analyse the economy, it demands a bottom-up strategy.

1.1.1 *Concepts covered under Microeconomics*

Microeconomics involves the study of several key concepts such as:

- **Incentives and behaviours -** How people react to situations, whether as individuals or in organisations.
- **Utility theory -** It states that consumers will choose a combination of goods that will maximise their happiness or "utility," subject to the constraint of how much income they have available to spend.
- **Production theory -** It is the study of production—or the process of converting inputs into outputs. In order to maximise profits, producers seek to select the combination of inputs and methods of combining them that will result in minimizing the cost.

- **Price theory** - The interaction of utility and production theory results in the theory of supply and demand, which determines prices in a competitive market.
- In a perfectly competitive market, the price demanded by consumers is the same as the price supplied by producers. As a result, economic equilibrium is achieved.

1.1.2 *Significance*

- Microeconomics can be used in a positive or normative sense.
- **Positive microeconomics** explains economic behaviour and what to expect when certain conditions change. For example,
  - If a car manufacturer raises the price of its vehicles, positive microeconomics predicts that consumers will buy fewer vehicles than before.
  - When a major copper mine in South America collapses, the price of copper tends to rise because supply is limited.
  - Positive microeconomics may assist an investor in understanding why Apple Inc. stock prices may fall if consumers purchase fewer iPhones.
- These positive microeconomic explanations, conclusions, and predictions can then be used normatively to prescribe what people, businesses, and governments should do in order to achieve the most valuable or beneficial patterns of production, exchange, and consumption among market participants.
- This extension of microeconomic implications from what is to what ought to be or what people ought to do necessitates at least the implicit application of some sort of ethical or moral theory or principles, which usually means some form of utilitarianism.

1.2 What is Macroeconomics?

Macroeconomics is the study of a country's economic progress and actions. It also covers the examination of policies and other influencing factors that have a broad impact on the economy. Macroeconomics is based on a top-down strategy, using tactics such as –

A country's overall economic growth.

- Unemployment and inflation influencing factors.
- Fiscal policies that are expected to have an impact on interest rates.
- Effect of Globalisation and international trade
- Reasons for differences in economic growth between countries.

Another characteristic of macroeconomics is that it is concerned with aggregated growth and its economic correlation.

TABLE 1.1: DIFFERENCE BETWEEN MICROECONOMICS AND MACROECONOMICS

Parameter	***Microeconomics***	***Macroeconomics***
Scale of Study	Microeconomics relates to the individual economic agents.	Macroeconomics is related to the study of the aggregate.
Field of Study	Microeconomics is concerned with issues and strategies concerning the most efficient use of resources and economic activity, such as pricing determination.	Macroeconomic analysis is concerned with policies affecting income, employment, and resource growth at the broadest level.
Scope	Price determination in the market for products and services is the focus of microeconomic study.	Macroeconomics is concerned with the overall income determination in the economy.
Methods	The method of partial equilibrium analysis, which is focused on significant aspects associated with economic activity, dominates microeconomic research.	The mutual dependency of significant economic aggregates is analysed in macroeconomics, and this is known as Quasi General Equilibrium Analysis.
Analytical Factors	Microeconomics is the study of the behaviour of economic variables when they are in a state of equilibrium.	The study of the behaviour of economic aggregates under a state of disequilibrium is known as macroeconomic analysis.
Limitations	It is based on implausible assumptions, such as the assumption of full employment in the community in microeconomics, which is not at all realistic.	It has been examined that the 'misconception of composition' includes, which occasionally fails to be accurate because what is true for the aggregate may not be true for individuals.

1.3 Conclusion

Macroeconomics and microeconomics are inextricably linked. All microeconomic studies can aid in the comprehension and analysis of macroeconomic factors. Both economic analysis branches are complementary and supplementary to one another. These have practical applications in the realms of economics and commerce.

2. Aggregate Demand

Aggregate demand is the total amount of demand for all finished goods and services produced in a given economy. The total amount of money exchanged for those goods and services at a specific price level and point in time is referred to as aggregate demand.

The **aggregate demand curve** depicts the total amount of goods (and services) demanded by the economy at various price levels. The price level of all final goods and services is represented by the vertical axis. The horizontal axis represents the real quantity of all goods and services purchased as measured by real GDP. The **aggregate demand curve (AD)**, is downward sloping, as are the demand curves for individual goods, implying that there is an inverse relationship between the price level and the quantity demanded of real GDP.

2.1 Concept

- Aggregate demand is a macroeconomic term that refers to the total demand for goods and services in a given period at any given price level.
- Since the two metrics are calculated in the same way, aggregate demand over time equals **gross domestic product (GDP).**
- GDP is the total amount of goods and services produced in an economy, whereas aggregate demand is the desire or demand for those goods.
- The aggregate demand and GDP increase or decrease together as a result of the same calculation methods.

2.2 Components of Aggregate Demand

2.2.1 *Government Spending (G)*

The total amount spent by the government on infrastructure, investments, defense and military equipment, public sector facilities, healthcare services, and government employees is referred to as government spending.

It does not include spending on transfer payments, such as pension plans, subsidies, and aid transfers to needy countries.

2.2.2 *Consumption Spending (C)*

- It is the largest component of aggregate demand in an economy, and it refers to the total amount spent by individuals and households on goods and services in the economy.
- Consumption spending is influenced by a number of factors, including disposable income, per capita income, debt, consumer expectations of future economic conditions, and interest rates.

- It is important to note that consumption spending excludes spending on residential structures, which is included in the investment spending component.

2.2.3 *Investment Spending (I)*

- The total expenditure on new capital goods and services such as machinery, equipment, inventory changes, investments in non-residential structures, and residential structures is referred to as investment spending.
- Investment spending is influenced by factors such as interest rates (which determine the cost of borrowing), economic forecasts, and government incentives (such as tax benefits or subsidies for investing in renewable energy).

Net Exports (X-M)

- Exports are products manufactured by domestic producers and sold abroad, whereas imports are products manufactured abroad and imported for domestic consumption.
- It is important to remember that aggregate demand is the total demand for goods and services produced domestically; thus, exports are added to aggregate demand while imports are subtracted.
- Net Exports is a measure of exports minus imports that is an important determinant of aggregate demand.

2.3 Calculating Aggregate Demand

The aggregate demand equation includes consumer spending, private investment, government spending, and the net of exports and imports. The formula is shown below:

Aggregate Demand = C + I + G + Nx

where,

C = Consumer spending on goods and services

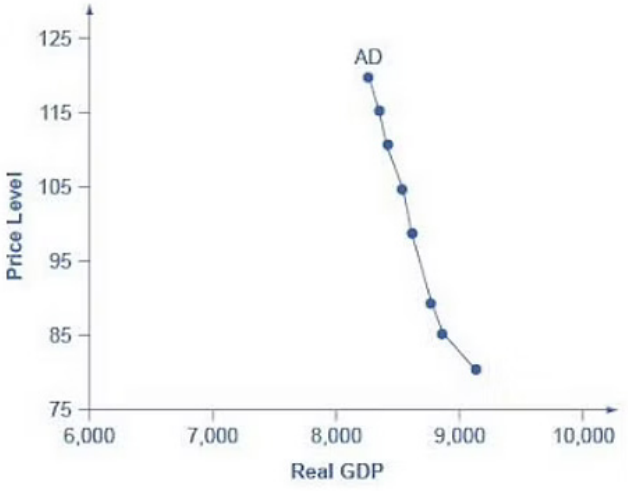
I = Private investment and corporate spending on non-final capital goods (factories, equipment, etc.)

G = Government spending on public goods and social services (infrastructure, medicare, etc.)

Nx = Net exports (exports minus imports)

2.4 Aggregate Demand Curve

- If aggregate demand were represented graphically, the total amount of goods and services demanded would be on the horizontal X-axis, and



the overall price level of the entire basket of goods and services would be on the vertical Y-axis.

- Like most typical demand curves, the aggregate demand curve slopes downward from left to right. As the price of goods and services rises or falls, demand rises or falls along the curve.
- Furthermore, the curve can shift due to changes in the money supply or tax rate increases and decreases.
- The downward slope of the AD curve indicates that increases in the price level of an output result in less amount of total spending.
- To fully comprehend why price increases lead to lower spending, we must first comprehend how price changes affect the various components of aggregate demand.

2.5 Factors Influencing Aggregate Demand

2.5.1 *Pigou's Wealth Effect*

- According to Pigou's Wealth Effect, consumers are wealthier at lower price levels (assuming that wages are constant).
- At lower price levels, disposable income is higher, allowing consumers to spend more on goods and services, increasing demand for output.
- As the price level rises, the purchasing power of savings held in bank accounts and other assets decreases, being eaten away to some extent by inflation.
- Consumption spending will fall as the price level rises because an increase in the price level reduces people's wealth.

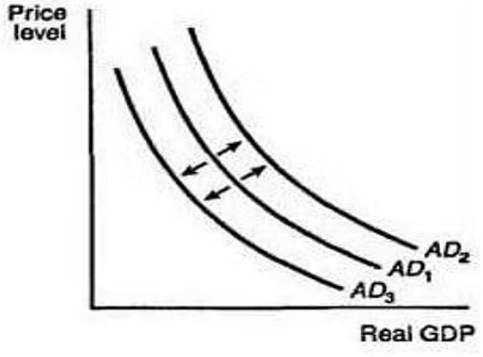
2.5.2 *Interest Rate Effect*

- The interest rate effect explains why, as outputs rise, the same purchases require more money or credit.
- Interest rates will rise as a result of the increased demand for money and credit.
- Higher interest rates, in turn, will reduce borrowing by businesses for investment purposes as well as borrowing by households for homes and automobiles, thus lowering both consumption and investment spending.

2.5.3 *Exchange Rate Effect*

- When the value of a country's currency falls in relation to other currencies, domestic goods become more affordable to foreigners while imports become more expensive.
- As a result, at lower price levels, when domestic goods are cheaper than imported goods, demand for exports rises, resulting in an increase in aggregate demand.

2.6 Changes in Aggregate Demand



- Shifts in the aggregate demand curve represent changes in aggregate demand.
- Below is an illustration of the two ways in which the aggregate demand curve can shift.
- A shift to the right of the aggregate demand curve, from AD 1 to AD 2, indicates that the quantity demanded of real GDP has increased at the same price levels.
- A shift to the left of the aggregate demand curve, from AD 1 to AD 3, indicates that the quantity demanded of real GDP has decreased at the same price levels.
- Changes in the price level do not cause changes in aggregate demand.

- Changes in demand for any of the components of real GDP cause them instead. For example,
  - Assume that consumers reduce their spending on all goods and services, possibly as a result of a recession. The aggregate demand curve would shift to the left as a result.
  - Assume interest rates fall and investors increase their investment spending; the aggregate demand curve shifts to the right.
  - The aggregate demand curve would shift to the left if the government cut spending to reduce the budget deficit.
  - If foreigners' incomes rose, allowing them to purchase more domestic goods, net exports would rise and aggregate demand would shift to the right.
  - These are just a few of the many possible shifts in the aggregate demand curve. However, none of these explanations have anything to do with price changes.

2.7 Significance

- It is a method of examining the total demand for goods and services in any economy.
- It is a macroeconomic tool used to help determine or predict overall economic strength within a country over a given time period, usually a year.
- It is a useful tool for assessing economic health and the factors that can influence it.
- It enables one to see how a country progresses from a slowdown to a recession, or how a country can recover from a recession.
- A country's trade position can also be deduced from aggregate demand. If the value of imports exceeds the value of exports, the country has a trade deficit with the countries from which it imports goods.
- According to Keynes' theory, the level of employment is determined by the level of aggregate demand rather than the price of labour, as classical economics proposed.
- Aggregate demand is also useful for estimating the impact of prices on productivity.

2.8 Drawbacks

- Since aggregate demand is measured by market values, it only represents total output at a given price level and does not always reflect a society's quality of life or standard of living.

- Furthermore, aggregate demand measures a wide range of economic transactions involving millions of people and for a variety of purposes.
    - As a result, determining the causality of demand and running a regression analysis, which is used to determine how many variables or factors influence demand and to what extent, can become difficult.
- The relationship between growth and aggregate demand has been the subject of major debates in economic theory for many years.

2.9 Conclusion

- All consumer goods, capital goods, exports, imports, and government spending programs are included in aggregate demand.
- As long as the variables trade at the same market value, they are all considered equal.
- An increase in any of the aggregate demand components – consumption spending, investment spending, government spending, and net exports shifts the aggregate demand curve to the right, while a decrease in any of these components shifts the aggregate demand curve to the left.

3. Aggregate Supply

Aggregate supply, also known as **total output**, is the total supply of goods and services produced within an economy in a given period at a given overall price. The **aggregate supply curve (AS)** describes the relationship between price levels and the quantity of output that firms are willing to provide. Generally, aggregate supply and the price level have a positive relationship.

Aggregate supply is usually calculated over a year since the changes in supply tend to lag changes in demand.

3.1 Concept

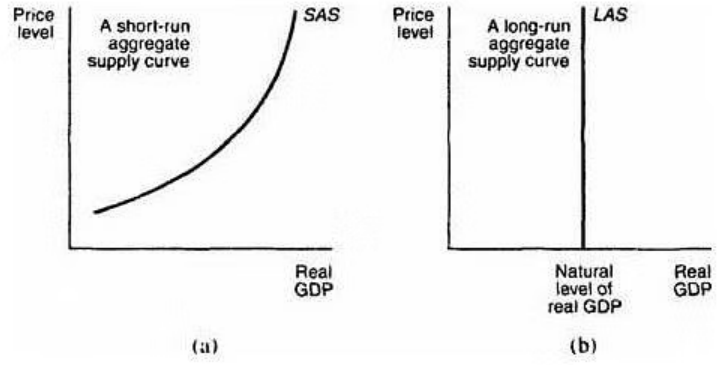
- Rising prices are usually an indication that businesses should increase production to meet increased aggregate demand.
- When demand rises in the face of constant supply, consumers compete for the goods available and, as a result, pay higher prices.
- Due to this dynamic, the firms are induced to increase output in order to sell more goods.
- As a result of the increased supply, prices normalize while output remains elevated.

3.2 Types of Aggregate Supply Curves

3.2.1 *Short-run Aggregate Supply Curve (SRAS)*

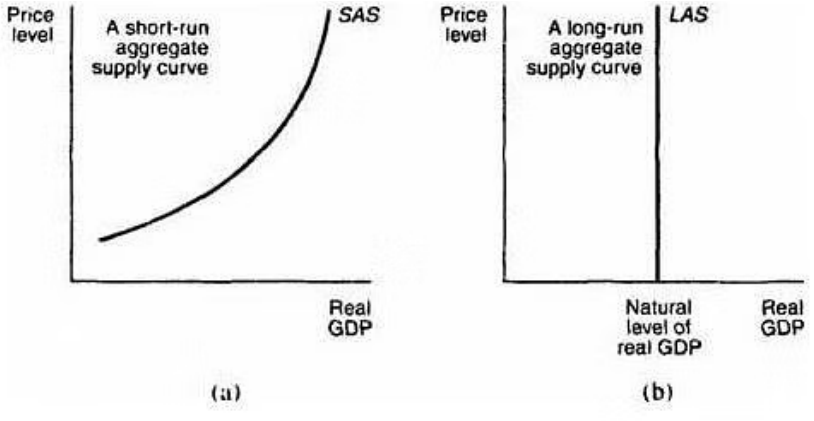
- The short-run aggregate supply curve (SRAS) is considered a valid description of the economy's supply schedule only in the short run.
- The short-run is defined as the period that begins immediately after a price increase and ends when input prices have increased in proportion to the price increase.
- The prices paid to providers of input goods and services are referred to as input prices.
- Wages paid to employees, interest paid to capital providers, rent paid to landowners, and prices paid to suppliers of intermediate goods are all examples of input prices.
- The SRAS curve is based on the assumption that input providers do not or cannot immediately account for increases in the general price level, so it takes some time–referred to as the short run–for input prices to fully reflect changes in the price level for final goods.
- In the short run, sellers of finished goods receive higher prices for their goods without a proportional increase in the cost of their inputs.

- The higher the price level, the more willing these sellers will be to supply.
- The SRAS curve, depicted in the below figure is thus upward sloping, reflecting the positive relationship that exists in the short run between the price level and the quantity of goods supplied.



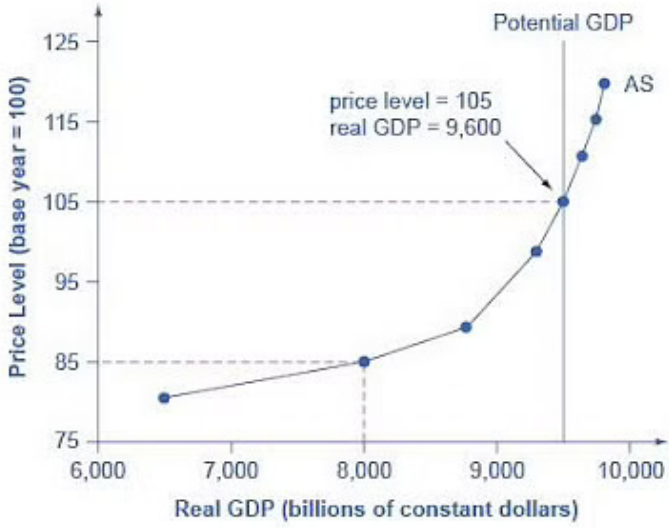
3.2.2 *Long-run Aggregate Supply Curve (LRAS)*

- The **long-run aggregate supply (LRAS) curve** describes the economy's supply schedule in the long run.
- The long-run is defined as the time period during which input prices have completely adjusted to changes in the price level of final goods.
- In the long run, the increase in prices received by sellers for their finished goods is completely offset by the proportional increase in prices paid by sellers for inputs.
- As a result, the amount of real GDP supplied by all sellers in the economy is unaffected by changes in the price level.



- The LRAS curve, depicted in the figure below, is a vertical line, indicating that changes in the price level have no effect on long-run aggregate supply.
- It's worth noting that the LAS curve is vertical at the point labeled "natural level of real GDP."
- The natural level of real GDP is defined as the level of real GDP that occurs when all of the economy's available input resources are fully utilized.

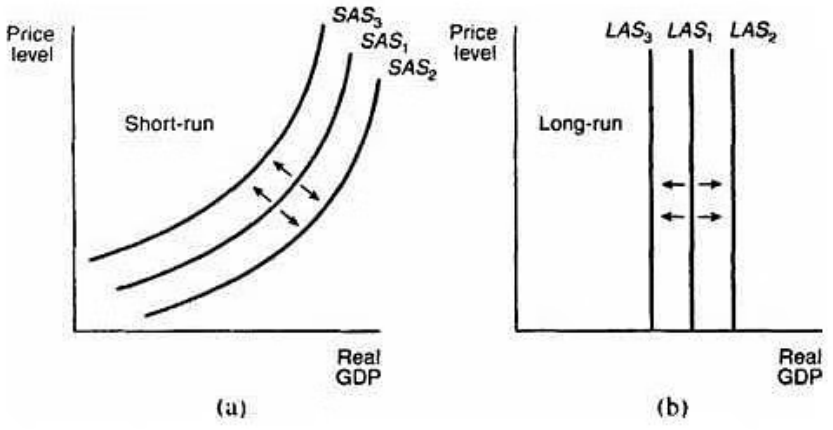
3.2.3 *Aggregate Supply Curve (AS)*



- The horizontal axis of the diagram represents real GDP or GDP adjusted for inflation. The price level is depicted on the vertical axis.
- The average price of all goods and services produced in the economy is referred to as the price level. It is an index number, similar to the GDP deflator.
- The vertical axis shows the price level for final goods or outputs purchased in the economy, not the price level for intermediate goods and services that are inputs to production.
- The AS curve describes how suppliers will respond to higher prices for final outputs of goods and services while input prices such as labour and energy remain constant.
- If firms across the economy face a situation in which the price level of what they produce and sell rises while their production costs remain constant, the lure of higher profits will induce them to expand production.

3.2.3.1 *Changes in Aggregate Supply Curve*

- Shifts in the aggregate supply curve represent changes in aggregate supply.
- The figure given below depicts the various ways in which the SRAS and LRAS curves can shift.



- A shift to the right of the SRAS curve from SRAS 1 to SRAS 2 or of the LRAS curve from LRAS 1 to LRAS 2 indicates that the quantity supplied of real GDP has increased at the same price levels.
- A shift to the left of the SRAS curve from SRAS 1 to SRAS 3 or of the LRAS curve from LRAS 1 to LRAS 3 indicates that the quantity supplied of real GDP has decreased at the same price levels.
- Changes in aggregate supply, like changes in aggregate demand, are not caused by changes in the price level.
- They are instead primarily caused by changes in the following two factors:

3.3 Input Prices

- Since the SRAS curve is drawn under the assumption that input prices remain constant, the decrease in aggregate supply caused by an increase in input prices is represented by a shift to the left of the SRAS curve.
- A shift to the right of the SRAS curve represents an increase in aggregate supply as a result of lower input prices.
- For example, the price of oil, an input good, rose dramatically in the 1970s as a result of efforts by oil-producing countries to limit the amount of oil sold.
- Oil or oil products are used as inputs in many final goods and services.

Due to rising costs, suppliers of these final goods and services were forced to reduce their supply at all price levels.

3.4 Economic Growth

- Positive economic growth occurs as a result of an increase in productive resources such as labour and capital.
- With more resources, it is possible to produce more final goods and services, resulting in an increase in the natural level of real GDP.
- Positive economic growth is thus characterized by a shift to the right of the LRAS curve.
- Negative economic growth, on the other hand, reduces the natural level of real GDP, causing the LRAS curve to shift to the left.

3.5 Significance

- The importance of aggregate supply was discovered in the 1970s.
- A reduction in oil supply orchestrated by Saudi Arabia late in 1973 resulted in rising unemployment and inflation in the United States.
- Higher unemployment, according to the Phillips Curve, should have resulted in lower inflation.
- To explain the anomaly, economists coined the phrase **"adverse supply shock."**

3.6 Drawbacks

- Changes in aggregate supply are a reaction to changes in aggregate demand, which are manifested as price changes.
- However, because many prices are sticky and economic agents take time to recognize changes in price levels, there is a difference between aggregate supply in the short run and aggregate supply in the long run.
- Keynes argued that since prices are sticky in the short run, they do not decline enough to stimulate aggregate demand which can return real GDP to its natural level.
- The only way to increase aggregate supply is to raise prices, which reduces aggregate demand. As a result, firms cut back on production.
- Input prices can also be affected by inflation expectations.
- For example, if union workers anticipate higher inflation, they will demand higher wages when their labour contract is renewed
- Factors that reduce productivity, such as increased regulations, strikes, or, depending on the industry, bad weather, can also cause the SRAS curve to shift to the left.

3.7 Conclusion

The goods and services produced by an economy are referred to as aggregate supply. It is propelled by four production factors: labour, capital goods, natural resources, and entrepreneurship. The availability of financial capital augments these factors.

4. Types of Goods

Goods are items and resources that meet people's needs and desires. A good can be a physical item, a service, or a combination of two.almost anything is good if it provides some sort of benefit to consumers. Since goods are diverse, they're categorized into distinct groups with unique characteristics that determine their value.

Learning about the various types of goods can assist you in determining how they affect the economy and your own life. In this article, we will define goods and identify various types using examples.

4.1 What is Consumption Goods?

Consumption goods are those items that are directly employed to satisfy human needs. These aren't used in the manufacture of any other products. Consumption goods are final items that are meant to be consumed. **Households, for example, ice cream and Chocolate.** The UPSC Indian Economic Syllabus includes the Consumption Goods which is described in this article.

- Consumer goods are items purchased by the average person for personal consumption.
- Consumer goods, also known as final goods, are the end product of production and manufacturing and are what a customer will see on the store shelf. Consumer goods include things like clothing, food, and jewelry.
- Because basic or raw minerals, such as copper, must be processed into usable items, they are not considered consumer goods.

Examples of Consumption good

- Food
- Clothing
- Vehicles
- Electronics
- Appliances

Conclusion

- Consumer goods, often known as final goods, are goods supplied to consumers for their personal use or enjoyment rather than as a way of generating additional economic activity.
- Consumer goods can be classed as durable (useful for more than three years), nondurable (useful for less than three years), or pure services from an economic standpoint (consumed instantaneously as they are produced).
- Consumer goods can be divided into distinct categories for marketing purposes depending on consumer behaviour, how customers shop for them, and how frequently they shop for them.

4.2 Capital Goods

Any tangible assets that an organization uses to generate goods or services, such as office buildings, equipment, and machinery, are referred to as **capital goods**. The UPSC Indian Economic Syllabus includes the Capital Goods which is described in this article.

Capital Goods

- Fixed or tangible assets purchased by a business to generate completed products or consumer goods are referred to as capital goods. Capital goods are difficult to convert into cash. They are long-lasting and do not rapidly wear out.
- Equipment, machinery, buildings, computers, and other capital items are some of the most common examples. Capital goods are most typically employed in macroeconomics to determine capital formation and output capability.
- Capital goods, land, labor, and entrepreneurship are all necessary components in the production of commodities. The fundamental factors of production are these four factors taken together.
- The goods that can be used to increase production are referred to as capital goods. Plant, property, and equipment are the three most common types of capital goods. The producer needs to invest a

significant quantity of money to purchase capital goods. As a result, in accounting, the acquisition of a capital good is referred to as a capital expense.

- Capital goods are depreciated to the extent of their useful life using depreciation procedures in accounting because they are not used in a year.

Importance of Capital Goods in the Economy

- Capital goods are products that require significant investment and play a vital role in the economy.
- They operate as a barrier to entry for new businesses that do not have the financial resources to purchase such equipment.
- A company cannot compete in the market if it is unable to create items owing to a lack of equipment.
- Capital goods play a critical role in increasing long-term goods production capacity, or in other words, increasing the capacity to produce products and services.

TABLE 13.1: CAPITAL GOODS VS. CONSUMER GOODS

Basis for Comparison	***Consumer Goods***	***Capital Goods***
Meaning	Consumer goods are goods that are utilized for consumption by the end-user.	Capital goods are goods that are used to manufacture consumer goods.
Marketing	Business to Consumer	Business to Business
Purpose	Purchased for personal use only.	Purchased to be used in the production of other products.

Buyer	Consumer	Manufacturers
Demand	Direct Demand	Derived Demand
Price determination	By suppliers	By companies
Meant for	Final Consumption	Final Investment

Conclusion

- Businesses use capital goods, which are man-made, long-lasting commodities, to generate goods and services. Capital items include tools, machinery, buildings, automobiles, computers, and construction equipment.
- One of the four major economic elements is capital goods. An increase in capital goods orders and shipments indicates that firms anticipate more demand and that the economy will expand.

4.3 Intermediate Goods

Intermediate goods are things that are used in the manufacturing of other commodities that are eventually sold to customers. In most cases, intermediate goods are utilised directly by a producer, sold to another company to build another intermediary good, or sold to another company to make a completed product. The UPSC Indian Economic Syllabus includes the Intermediate Goods which is described in this article.

What are Intermediate Goods?

- Goods used by businesses **to produce goods or services** are referred to as intermediate goods. Producer goods are another name for these items.
- To put it another way, intermediate goods are used to make final or consumer goods. They can also be described as inputs into other goods and as ingredients in the end goods.
- Intermediate products can be created by a company for use in the manufacture of final goods or finished goods, or they can be sold to another company that produces final goods.
- **Semi-finished goods** are another term for these items. Intermediate goods can be utilised in the following three ways:
    1. Producing and utilizing for personal gain
    2. Producing and selling intermediate goods to other firms
    3. Companies buy them for a specific purpose or to make other intermediate items.

Intermediate goods can **either form part of the final product or be altered beyond recognition** during the manufacturing process to create completed goods.

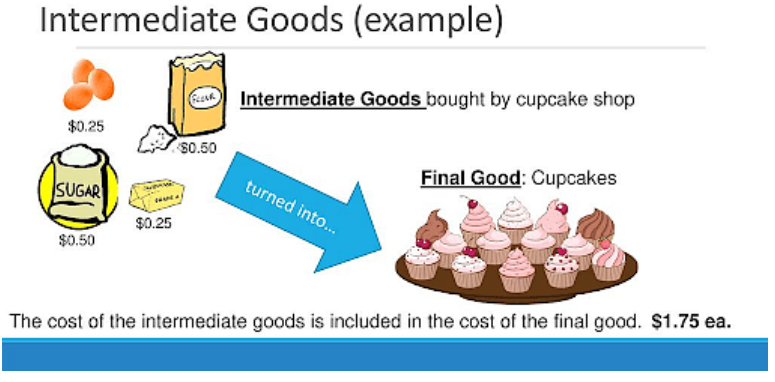
Intermediate Goods and Gross Domestic Product

- The GDP of a country is not calculated using intermediate goods. The reason for not adding them in the GDP is that doing so would result in the value of the items being counted twice, although the standard is to only calculate the price of finished goods once.

Classify Goods

How to Classify Goods as Intermediate and Final Goods

- The best way to identify things as intermediate or final goods is based on the product's intended purpose rather than the product itself.
- Any commodity can be classed as a final good or an intermediate good depending on its intended purpose.
- With the help of an example, this can be better understood.
- Salt is used in the baking of bread as well as for direct eating. Salt serves as an illustration of how an intermediate item can also serve as a final good.
- Salt used in bread making is categorized as an intermediate good, whereas salt consumed directly is classified as a final good.



Few more illustrations

- Car engines are an example of a good that is created and then used as inputs into final goods by the producer.
- Some vehicle manufacturers will build their own unique car engines, which will then be used as inputs into autos that will be sold to consumers once they are done.
- Steel, which is used in the completion of buildings, bridges, cars, and trains; wood, which is used in the construction of homes, furniture, and hardwood flooring; precious metals such as gold and silver, which are used in the production of jewellery; and glass, which is used in the

production of windows, ornaments, wine bottles, and photo frames, are just a few examples of goods that are produced and then sold in their partially completed form to other companies.

Conclusion

- An intermediate good, also known as a consumer good, is a product that is utilised to make a final good or finished product. Because salt is consumed directly by consumers and utilised by producers to make other food products, it can be considered a finished product.
- Intermediate goods are traded between industries for resale or for use in the manufacture of other items. Because they are utilised as inputs to form part of the finished product, these commodities are also known as semi-finished products.

4.4 *Speciality Goods*

- Specialty goods have unique characteristics (and prices) and necessitate special purchasing efforts.
- **Rare art collectibles, antiquities**, and fashion items are examples of specialty goods.

4.5 *Inferior Goods*

- An inferior good is one in which an increase in income causes a decrease in demand. It has a **negative elasticity of demand**.
- For example, as your income grows, you buy less low-value bread and more high-quality, organic bread.

4.6 *Normal Goods*

- An increase in income leads to an increase in demand. It has a **positive elasticity of demand.**
- It is important to note that a normal good can be either income elastic or income inelastic.

4.7 *Luxury Goods*

- A luxury good is one in which an increase in income causes a greater percentage of increase in demand. This indicates that the **elasticity of demand is greater than one**.
- High-Definition televisions, for example, would be considered a luxury item.
- People spend a greater proportion of their income on luxury goods as their income rises.

- It should be noted that a luxury good is also a normal good, but a normal good is not always a luxury good.

4.8 *Complementary Goods*

- Items that are used together. For example, a television and a DVD player.

4.9 *Substitute Goods*

- Products that are alternatives, such as Pepsi and Coca-Cola.

4.10 *Giffen Good*

- A rare type of good in which a price increase leads to an increase in demand.
- Since you can't afford more expensive goods, the income effect of a price increase causes you to buy more of this cheap good.
- For example, if the price of wheat rises, a poor peasant may no longer be able to afford meat and thus must purchase more wheat.

4.11 *Veblen / Snob Good*

- A good whose price increase encourages people to buy more of it. This is because they believe that more expensive goods are superior.

4.12 *Free Goods*

- If one does not need to pay anything for a good, it is called "free good".
- **Air – which we breathe** – is the best example of a free good. It has utility, but it is so abundant in nature that we don't have to pay a price for both its production and use.
- However, a free good sold for promotion is not a free good in the economic sense.

4.13 *Basic Goods*

- A basic good is one that does not have utility in and of itself but is derived from another good that does.
- For example, **cotton or textile** is a basic good because clothing made from it is useful.
- In another sense, basic goods are bulk or raw material products used in the production of new items in agriculture, manufacturing, or construction.

4.14 *Intermediate Goods*

- Intermediate goods are unfinished goods that are used as input for further processing.
- Thus, intermediate goods are found in the production chain between raw materials and finished goods.
- For example, **Sugarcane** is an intermediate good in the manufacture of Sugar.

4.15 *Finished Goods*

- A finished product has completed the necessary manufacturing and is ready to be used. Finished goods are ready for consumption or distribution.
- The electronics we use such as **TV, smart phones** are examples of finished goods.

4.16 *Producer Good*

- A producer is any good that is used to manufacture other goods or services.
- As a result, all basic goods, intermediate goods, and capital goods are Producer goods because they are used in the production of other goods.
- The basic and intermediate goods are raw materials, but NOT capital goods.

4.17 *Consumer Goods*

- While producer goods are used to make other goods, consumer goods are used for personal consumption.
- Consumer goods are generally, but not always, "Finished Goods" because they are ready to use without further processing or changes.
- Some consumer goods may require additional processing – for example, **cloth that must be sent to a tailor** is both a consumer good and an intermediate good.
- Consumer goods are classified into two types: consumer durable goods and consumer non-durable goods.

Consumer Durable Goods (aka. Consumer Durables)

- Non-perishable goods, such as electronics, are classified as consumer durables.
- Such items do not need to be purchased on a regular basis because they are designed to last for at least three years.
- They are generally more expensive than non-durables.

Consumer Non-durable Goods (aka. Consumer Non-durables)

- Consumer non-durables are perishable goods such as fruits, vegetables, cosmetics, food items, and so on that we must purchase on a regular basis.

4.18 *Convenience Goods*

- Convenience goods are items that are purchased frequently, quickly, and with minimal effort.
- These include **candy, ice cream, cold drinks, cigarettes, magazines**, and medicines, among other things.

4.19 *Shopping Goods*

- Shopping goods are those purchased after selecting, purchasing, and comparing various goods.
- In general, shopping goods are long-lasting items such as **furniture, dresses, electronic** items and appliances, and so on.

4.20 *Public Goods*

- Goods with non-rivalry and non-excludability characteristics, such as national defence.

4.21 *Merit Goods*

- Goods whose benefits people may underestimate and may have positive externalities, such as education.

4.22 *Demerit Goods*

- Goods in which the consumption cost may be underestimated and it may often have negative externalities, such as smoking and drugs.

Conclusion

- In economics, goods are items that provide some kind of benefit to the people who use them. Most businesses manufacture and sell goods, whether they are physical goods or services that consumers can use on a regular basis.

5. Final Goods

Final goods are finished goods that are sold in the market for consumption or investment. Since these are finished goods that do not require further processing, they are produced for their own sake. Final goods meet the needs of producers or consumers, or both.

The value of these goods constitutes the **Gross Domestic Product (GDP).** Only newly produced goods and services are considered final goods when calculating GDP. It is done to avoid counting goods that have already been counted.

5.1 Classification of Final Goods

Final goods are divided into two groups: **Consumption Goods and Capital Goods.**

5.1.1 *Consumption Goods*

- **Consumption goods** are those that directly satisfy the desires of consumers.
- For example, Bread, butter, shirts, pens, televisions, furniture, and so on.

Consumption goods are further sub-divided into following categories:

- **Durable goods:** It refers to items that can be used repeatedly over an extended period of time. For example, televisions, refrigerators, and so on.
- **Semi-durable goods:** Semi-durable goods are those that can only be used for a limited time. These items have a one-year shelf life. For example, clothing, crockery, shoes, and so on.
- **Non-durable goods:** These goods are those that are consumed in a single act of consumption. These items can only be used once. For example, milk, bread, cereal grains, paper, and so on.
- **Services:** Services are non-material goods that directly satisfy human desires. They are intangible activities, which cannot be seen or touched. For example, the service of teachers, doctors, and banks.

5.1.2 *Capital Goods*

- **Capital goods** are finished goods that aid in the production of other goods and services. For example, plant and machinery, equipment, and so on.
- They will be used for productive purposes in the future and have a life expectancy of several years.

- They do not lose their identity during the manufacturing process, i.e., they do not become merged during the manufacturing process.
- They will require repairs or replacement over time as they depreciate.
- They have derived demand because their demand is derived from the demand for other goods that they contribute to the production of.

Examples;

- All goods (durable or non-durable) purchased by consumer households. For example TV, fridge, vegetables, electricity, food, etc.
- Goods purchased by production units (producer) for investment (for capital formation). For example machinery, furniture, etc.
- There is no clear dividing line between consumption and capital goods. The same good can be both consumption and a capital good. It is determined by the ultimate use of the good.
- A machine purchased by a household is consumption good, whereas a machine purchased by a firm for use in the business is a capital good.

5.2 Conclusion

A final good is a product that is manufactured for direct use by end-users. Final goods are also known as consumer goods. Simply put, the term refers to any commodity produced by a company and consumed by a consumer. The consumer consumes it to meet his or her immediate need.

6. Unemployment

Unemployment is a circumstance in which a person who is actively looking for a job is unable to find work. Unemployment is seen as a significant indicator of the economy's health. **Types of Unemployment** are Frictional, cyclical, structural, voluntary, seasonal, disguised, and open and underemployment. This article discusses the types of unemployment that are essential for UPSC aspirants.

6.1 Types of Unemployment

Unemployment can be grouped into various types based on the nature of work, the structure of the economy, the nature of the seasons, technological advancements in an economy, etc. Various types of unemployment are discussed below.

6.1.1 *Frictional Unemployment*

- It is when there is the least amount of unemployment prevailing in an economy due to workers quitting their previous jobs and searching for new jobs.
- One of the major causes of occurrence of frictional unemployment is **lack of information about the availability of jobs and non-willingness of mobility** on the part of workers (it means workers are not willing to travel to a distant place or a new state for employment).
- A frictionally unemployed person remains unemployed for a **very brief period of time.**

6.1.2 *Cyclical Unemployment*

- It occurs during the **cyclical trends of booms and recessions** of a business cycle.
- This type of unemployment occurs mainly **due to either deficiency or fall in effective demand from consumers** which in turn leads to a fall in production and low demand for labor.
- This type of unemployment occurs for a long period of time and workers remain unemployed during the entire phase of slowdown.
- The unemployment crisis due to the 2008 financial crisis is an example of

6.1.3 *Voluntary unemployment*

- It is when workers are **either not seeking work or are in transition** from one job to another.

- Voluntary unemployment is present all the time in an economy.
- As there will always be some workers, who quit their previous jobs in search of new ones

6.1.4 *Involuntary unemployment*

- It is when **workers are actively seeking employment and are willing to work but are unable to get work**.
- Involuntary unemployment happens in an economy during the **time of depression** and decreases in aggregate demand for goods and services.

6.1.5 *Structural unemployment*

- It refers to a situation that arises as a result of a **change in the structure** of the economy.
- For instance, when an economy transforms itself from a **labour-intensive to a capital-intensive economy**, structural unemployment happens due to the mismatch of skills.
- As a result, workers who do not know how to operate the new and advanced technologies will be removed.
- This type of unemployment happens as the current workers do not have the skills required by their employers.

6.1.6 *Seasonal unemployment*

- This happens **during specific seasons of the year**. It is more prevalent in sectors and occupations such as agriculture, holiday resorts etc., where production activities take place only in some seasons.
- Therefore, they offer employment for only a certain period of time in a year.
- People **engaged in seasonal activities** may remain unemployed during the off-season

6.1.6.1 *Reasons for Prevalence of Seasonal Unemployment*

- In India, agriculture is the most common occupation taken up by the people. Agriculture in India is mainly **dependent on monsoons**, due to which agricultural **labor has no work to do in the non-monsoon season**.
- Therefore, this implies that the labour has **no wages as well in the offseason**.
- They remain **unemployed for the rest of the year** when they don't have work. As the word itself indicates, seasonal unemployment in India is majorly caused by the change in seasons.

6.1.6.2 *Impact of Seasonal Employment*

- When the labor is unemployed for a part of the year, it becomes **difficult to cover up the expenses** incurred during the off-season such as periodical payment of rent and other bills, etc.
- Savings is not possible due to already **meager wages**.
- In a few places, people take up **various other jobs during the off-season**. This can help them build their skills and try out new things.
- It can cause **migration in search of work**, however, in the case of permanent migration, it could lead to **drainage of human resources**, which could have been tapped and used otherwise.

6.1.7 *Open unemployment*

- It is a condition where **people have no work to do**. It is also known as **naked unemployment**.
- Here individuals are able to work and are also willing to work but there is no work for them.
- It is frequently found in larger cities and is less frequent in villages. Most of such individuals come from villages in search of jobs or might originate in cities themselves.
- Such employment can be seen and counted in terms of the number of such persons. Hence it is called open unemployment..

6.1.8 *Under-employment*

- It is a scenario where employed people are **contributing to production less than they are capable of**.
- It can be estimated in terms of time, which is visible under-employment or type of work, which is invisible under-employment. Part-time workers come under this category.

6.1.9 *Disguised Unemployment*

- It occurs when a person is the **one who seems to be employed but actually, he is not. His/Her contribution to the total output is either zero or negligible**.
- When more individuals are engaged in a job than the number actually required it leads to a state of disguised unemployment.
- It is mostly seen in rural areas such as in agricultural activities

6.1.9.1 *Reasons for Prevalence of Disguised Unemployment*

- According to the census 2011 India, being the second-most-populous country has almost **70% of its total population in rural areas**.

- High population growth leads to **surplus labor**, especially in the rural areas however, employment in such areas **mostly remains seasonal**, thus creating disguised unemployment.
- **Poverty** results in limited capital in hands of the individual causes inability to purchase land and thus people have access to limited capital.
- **Limited availability of capital** increases the **dependency** of more people on limited resources.
- In labor-intensive economies with a high population, **labor is available at cheaper rates**, therefore more people are easily employed for a particular work, which could be done by a much lesser number of individuals
- At a time when the majority of India's population lives in rural areas with limited means, **people lack proper skills that need to be recruited at better places**.

6.1.9.2 *Measures to Prevent Disguised Unemployment*

- **Population control measures** to control the increase of the population.
- Increase in various measures that can provide easy availability of **credit to the people for self-employment.**
- Providing **skill development** and entrepreneurship programs.
- Encouraging **mobility of the workforce** from rural to urban areas.

6.1.10 *Vulnerable Employment*

This means, people, **working informally, without proper job contracts** and thus gets deprived of any legal protection. These persons are regarded as unemployed since records of their work are never maintained. It is one of the main types of unemployment in India.

6.1.11 *Technological Unemployment*

- It is unemployment that occurs as a **result of the loss of jobs due to changes in technological developments**.
- According to World Bank data, the proportion of jobs threatened by automation in India is 69% on a year-on-year basis.

6.2 Conclusion

Unemployment can be caused by various reasons ranging from changes in seasons, the structure of the economy to changing technological advancements. Unemployment caused due to seasonal nature can be temporary and have less impact on the economy, however, unemployment caused due to the structural nature of the economy can have a more permanent character.

7. Unemployment Rate

Unemployment happens when a person who is **actively searching for a job is unable to find work**. Rising unemployment indicates the **health and the growth potential** of the economy. **The unemployment rate** is the ratio of unemployed workers to the total labour force. According to the Centre for Monitoring Indian Economy **(CMIE)**, the unemployment rate in India is **6.57% in Jan 2022**. It can be measured by various metrics, one of which is the unemployment rate which would be discussed in this article from the perspective of UPSC aspirants.

7.1 What is the Unemployment Rate?

- The unemployment rate is the most **frequent measure of unemployment**.
- The unemployment rate is the number of people unemployed divided by the working population/people working in the labour force.
- It is represented in the following manner.
- Unemployment rate = (Unemployed Workers / Total labour force) × 100

7.2 Recent Trends in Unemployment Rate (January 2022)

- According to the Center for Monitoring Indian Economy (CMIE) unemployment rate in India in **January 2022 fell sharply to 6.57%**, the lowest rate recorded since March 2021.
- The lowest unemployment rate in January was recorded by Telangana at 0.7%.
- The unemployment rate in Gujarat was at 1.2%, in Meghalaya at 1.5%, in Odisha at 1.8%, and 2.9% in Karnataka.
- The highest unemployment rate was recorded in Haryana at 23.4% in January 2022.
- Also, a high rate of unemployment was seen in Rajasthan (18.9%), Tripura (17.1%), Jammu & Kashmir (15%), and Delhi (14.1%).
- Rural unemployment declined in January 2022 to 5.84% as against 7.28% in December 2021.
- **Urban unemployment was recorded at 8.16% compared to 9.30% in December 2021**.

7.3 COVID impact on Unemployment Rate

- Unemployment across the country was significantly impacted by the pandemic. For instance, the restriction was imposed in various parts

of the country such as in **Delhi the gyms, shopping malls, schools, and cinemas were closed**.

- States such as Haryana and West Bengal restricted public gatherings and imposed other similar curbs. These events impacted the economic output and **increased the unemployment rate.**

7.4 Conclusion

Unemployment is an evil that greatly impacts economies such as India with high demographic potential. If left unattended it can spiral from demographic dividend to demographic burden. This can be measured by various metrics, one being the unemployment rate, which tells about the percentage of unemployed individuals in an economy among individuals currently in the labor force.

8. Labour Force Participation Rate (LFPR)

Labor Force Participation Rate (LFPR) is known as the section of the working population in the age group of 16-64 in the economy currently **employed or either seeking employment**. According to the **Quarterly Bulletin (Oct-Dec 2020)** of the Periodic Labour Force Survey (PLFS), the **LFPR in urban areas was 73.6% and 20.6% for men and women respectively**. This article highlights the topic of labor force participation rate that is important for aspirants preparing for the UPSC examination.

8.1 What is the Labour Force Participation Rate?

- It is an important metric when the **economy is not growing or witnessing recession**.
- The labor force participation rate (LFPR) is a measure undertaken to evaluate the working-age population in an economy.
- The participation rate estimates the total number of people who are currently employed or are in the search of a job.
- People who are **not looking for a job such as full-time students, homemakers**, individuals above the age of 64, etc are not a part of this data set.

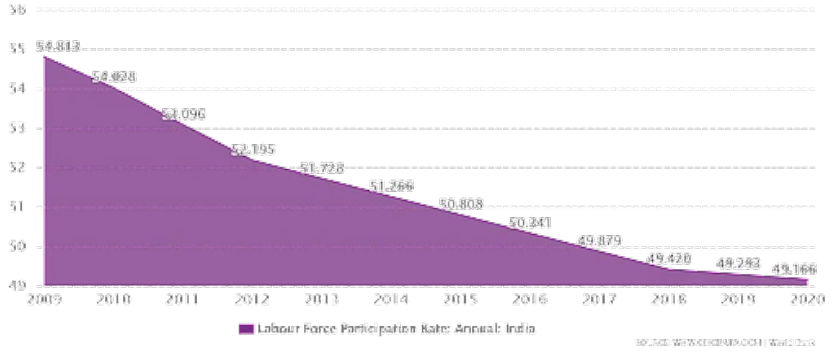
8.2 Significance

- During a recession, the labour force participation rate mostly decreases.
- During the time of recession, the economic activity is low which results in fewer jobs across the country.
- When jobs are less, people do not take extra efforts to focus on employment which eventually leads to a lower participation rate in the economy.
- The Labour force participation rate helps to **understand the unemployment rate in the economy**. Consistent analysis of the unemployment rate in the economy is essential.
- Higher labour force participation is a good sign for the economy whereas if it is on the lower side, it can also act as a warning sign for any economy.

8.3 Recent Trends

- Data for India's Labour Force Participation rate is provided by CEIC and the annual Periodic Labour Force Survey (PLFS).

- As per the CEIC data, the Labour Force Participation Rate dropped to 46.3 % in December 2020 as compared with 49.3 % in the previous year.
- It is updated every year from December 1990 to December 2020, with an average rate of 57.5%.
- It reached an all-time high of 58.4% in December 1990 and a record low of 46.3 % in December 2020.
- The Unemployment Rate of India increased to 7.1 % in Dec 2020.



Labour Force Participation Rate in India

8.4 Conclusion

Labour Force Participation Rate is one of the important indicators of labour market measure because it represents the relative amount of labour resources available for the production of goods and services. This metric helps the policymakers to provide conducive welfare measures that boost the participation of the labour force in the economy, thereby increasing the economic output.

Chapter 2: Basics of Macroeconomics

1. Law of Demand and Supply

The **law of demand and supply** is a theory that explains the interaction between resource sellers and buyers. The theory defines the relationship between the price of a given good or product and people's willingness to buy or sell it. In general, as prices rise, people are willing to supply more and demand less, and vice versa when prices fall.

1.1 Concept

- According to the **law of demand**, as prices rise, buyers demand less of an economic good.
- According to the **law of supply**, at higher prices, sellers will supply more of an economic good.
- These two laws interact to determine the actual market prices and volume of goods traded on a market.
- Several independent factors can influence the shape of market supply and demand, influencing both the prices and quantities observed in markets.

1.2 Law of Demand

- According to the law of demand, if all other factors remain constant, the higher the price of a good, the fewer people will demand that good. In other words, as the price rises, so does the quantity demanded.
- Buyers purchase less of a good at a higher price because as the price of good rises, so does the opportunity cost of purchasing that good.
- As a result, people will naturally avoid purchasing a product that requires them to forego the consumption of something else that they value more.
- The graph below depicts the curve's downward slope.

A, B, and C are points on the demand curve. Each point (A, B, C) represents the quantity demanded (Q) at a given price (P). For example, at point A, the quantity demanded is low (Q1) and the price is high (P1). The demand relationship curve illustrates the negative relationship between price and quantity demanded. Consumers demand less quantity of goods at higher prices, and more at lower prices.

1.2.1 *Demand Elasticity*

Demand elasticity or **price elasticity of demand** refers to the degree to which rising prices translate into falling demand. For example,

- The demand elasticity of corn is one if a 50% increase in corn prices causes a 50% decrease in corn demand.
- The demand elasticity is 0.2 if a 50% increase in corn prices only reduces the quantity demanded by 10%.
- For products with more elastic demand, the demand curve is shallower (closer to horizontal), and for products with less elastic demand, the demand curve is steeper (closer to vertical).
- A new demand curve must be drawn if a factor other than price or quantity changes.

- Assume that the population of a region explodes, increasing the number of mouths to feed. In this scenario, even if the price remains constant, more corn will be demanded, causing the curve in the graph below to shift to the right (D2).
- Other factors, such as changes in consumer preferences, can also cause the demand curve to shift.
- If cultural shifts cause the market to prefer quinoa over corn, the demand curve will shift to the left (D3).
- If consumer income falls, reducing their ability to purchase corn, demand will shift to the left (D3).

- If the price of a substitute increases from the consumer's point of view, consumers will buy corn instead, and demand will shift right (D2).
- If the price of a supplement, such as charcoal for grilling corn, rises, demand will shift to the left (D3).
- If the future price of corn is higher than the current price, demand will temporarily shift to the right (D2), because consumers will be more inclined to buy now before the price rises.

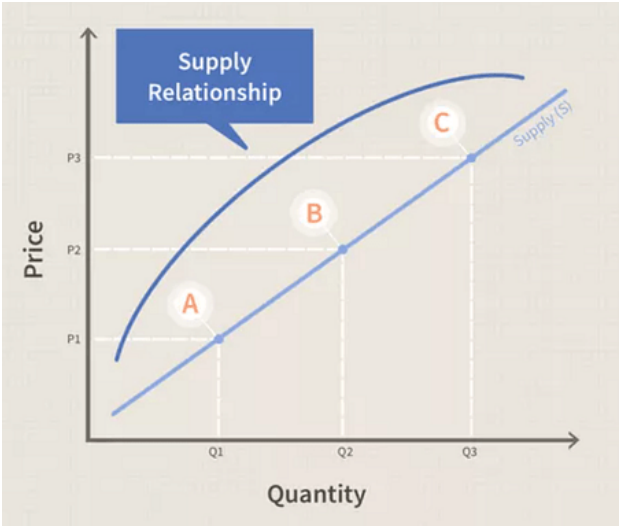
1.2.2 *Exceptions to Law of Demand*

- There are some exceptions to the rules that govern the relationship between goods prices and demand. A **Giffen good** is one of these exceptions.
- This is a staple food, similar to bread or rice, for which there is no viable substitute.
- In short, when the price of a Giffen good rises, demand rises, and demand falls when the price falls.
- The demand for these goods is increasing, which contradicts demand laws.
- As a result, the typical response (rising prices causing a substitution effect) will not apply to Giffen goods, and the price increase will continue to push demand.

1.3 Law of Supply

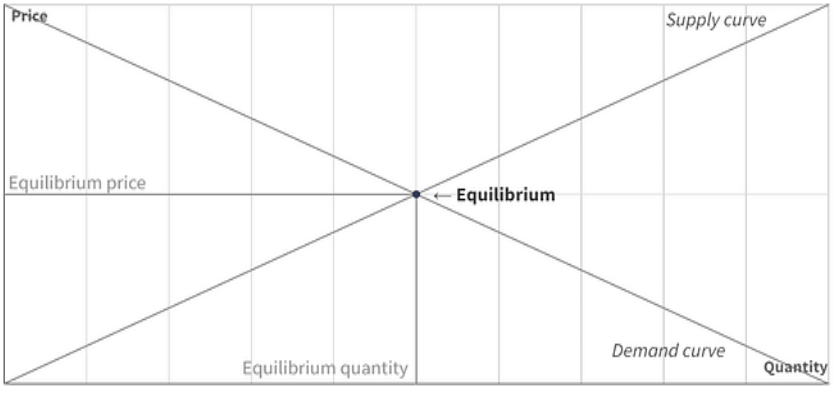
- The law of supply is a microeconomic law that states that, all else being equal, as the price of a good or service rises, so will the quantity of goods or services offered by suppliers, and vice versa.
- According to the law of supply, as the price of an item rises, suppliers will try to maximise their profits by increasing the quantity offered for sale.
- In contrast to the law of demand, the supply relationship has an upward slope. This means that as the price rises, so will the quantity supplied.
- The supply curve slopes upward because suppliers can choose how much of their goods to produce and later sell.
- However, at any given time, the supply that sellers bring to market is fixed, and sellers simply face the decision of selling or withholding their stock from a sale; consumer demand sets the price, and sellers can only charge what the market will bear.
- The chart below depicts the law of supply using an upward sloping supply curve.

A, B, and C are points on the supply curve. Every point on the curve represents a direct relationship between quantities supplied (Q) and price (P). So, at point A, the quantity supplied is Q1, and the price is P1, and so on.



1.3.1 *Equilibrium*

- The **equilibrium price**, also known as a **market-clearing price**, is the price at which the producer can sell all of the units he wants to produce and the buyer can buy all of the units he wants to buy.
- It is easy to see how an upward-sloping supply curve and a downward-sloping demand curve will intersect at some point.
- At this point, the market price is sufficient to entice suppliers to bring to market the same quantity of goods that consumers are willing to pay for at that price.
- Supply and demand are in equilibrium.



- The precise price and amount at which this occurs are determined by the shape and position of the respective supply and demand curves, both of which are influenced by a variety of factors.

Examples of Law of Supply

- When college students realise that computer engineering jobs pay more than English professor jobs, the supply of computer engineering majors will increase.
- When consumers begin to pay more for cupcakes than for donuts, bakeries will increase their cupcake output while decreasing their donut output in order to increase their profits.
- When your employer pays time and a half for overtime, you increase the number of hours you are willing to work.

1.4 Significance

- The Law of Demand and Supply is critical because it assists investors, entrepreneurs, and economists in understanding and forecasting market conditions.
    - For example, a company launching a new product may purposefully attempt to raise the price of the product by increasing consumer demand through advertising.
    - At the same time, they may try to raise their prices even further by deliberately limiting the number of units they sell in order to reduce supply.
    - In this scenario, supply would be reduced while demand would be increased, resulting in a higher price.
- Together with the Law of Supply, the Law of Demand helps us understand why things are priced the way they are and to identify opportunities to buy perceived under-priced (or sell perceived overpriced) products, assets, or securities.
    - For example, a company may increase output in response to rising prices caused by a surge in demand.

1.5 Drawbacks

- Unemployment is caused by a lack of demand for goods.
- During the Great Depression, factories sat idle and workers were laid off because there was insufficient demand for those products.
- In the case of **Giffen goods,** when the price of a Giffen good rises, demand rises, and demand falls when the price falls. For example, staple food, similar to bread or rice, for which there is no viable substitute.

- The demand for these goods is increasing, which contradicts demand laws.
- **Prestigious Goods:** Demand for goods of prestige like gold, demand may not decrease even if there is rise in price. They are purchased and consumed because of their high prices.
- **Hobbies:** The law of demand is not applicable in the case of goods of hobbies like ticket collection, and collection of historical and archaeological materials. The things are collected even by paying more and more price.
- **Addiction:** In case of goods and addiction like alcohol, tobacco, drugs etc the demand does not decrease even if there is an increase in price. Instead of the operation of law of demand consumers purchase more units even if there is a rise in price.
- **Future Prices:** When the price of rice rises and the seller expects the price to rise further in the future, supply will decrease because the seller will be induced to withhold supplies in order to sell later and earn larger profits.
- **Agricultural Output:** The law of supply may not apply in the case of agricultural commodities because production cannot be increased all at once in the event of a price increase.
- **Subsistence Farmers:** The law of supply may not apply in underdeveloped countries where agriculture is dominated by subsistence farmers.
- **Factors Other Than Price Are Not Constant:** The law of supply is stated with the assumption that factors other than the commodity's price remain constant.

1.6 Conclusion

One of the most fundamental economic laws, the law of supply and demand, is intertwined with almost all economic principles in some way. In practice, the market equilibrium price is determined by people's willingness to supply and demand a good, or the price at which the quantity of the good that people are willing to supply equals the quantity that people demand.

2. Elasticity of Demand

The responsiveness of the quantity demanded of a commodity to changes in one of the variables on which demand is based is known as elasticity of demand. To put it another way, it's the percentage change in quantity demanded divided by the percentage change in one of the variables that affect demand. The UPSC Indian Economic Syllabus includes the Elasticity of Demand which is described in this article.

2.1 What is Elasticity of Demand?

- Elasticity is defined as the ratio of one variable's percent change to another variable's percent change. It is denoted as follows:
- The elasticity of demand describes how sensitive a good's demand is to changes in other economic variables like prices and consumer benefits. Higher demand elasticity for an economic variable indicates that the customers are more conscious of changes in this variable.

2.2 Types of Elasticity of Demand

- Price elasticity of demand
- Cross elasticity of demand
- Income elasticity of demand
- Advertisement elasticity of demand

2.2.1 *Price elasticity of demand*

The percentage change in the quantity required divided by the percentage change in price is known as price elasticity of demand.

2.2.1.1 *Measurement of Price Elasticity of Demand*

The price elasticity of demand can be measured in three different ways.

1. Proportionate/Percentage method
2. Total expenditure or Total outlay method
3. Geometric method

2.2.2 *Cross Elasticity of Demand*

The responsiveness to a change in the pricing of related goods is referred to as cross elasticity of demand. It is defined as the ability to respond to changes in commodity X demand in response to a change in commodity Y price.

2.2.3 *Income Elasticity of Demand*

The responsiveness of demand for a commodity to changes in income, with all other factors, held constant, is known as income elasticity of demand.

2.3 Conclusion

A change in a commodity's price has an impact on its demand. By comparing the percentage price changes with the quantities demanded, we may determine the elasticity of demand or the degree of responsiveness of demand.

3. Price Elasticity of Demand

The price elasticity of demand is a measurement of how a product's consumption changes in response to price changes. Price elasticity is a term used by economists to describe how supply and demand for a product fluctuate as its price varies. The UPSC Indian Economic Syllabus includes the Capital Goods which is described in this article.

3.1 Price Elasticity of Demand Formula

- **The percentage change in the quantity demanded of a good or service by the percentage change in the price is known as price elasticity of demand.** To put it another way, the price elasticity of demand is the rate at which demand rises or falls in response to a change in price.
- A product's demand might be either elastic or inelastic. It is said to be elastic when the change in demand is proportionately larger than the change in price. It is considered to be inelastic when the change in demand is less than the change in price.
- The price elasticity of demand is measured by the slope of the demand curve. There is a quick change in demand as the demand curve steepens, indicating elasticity. A flatter curve, on the other hand, indicates inelastic demand since demand changes slowly.
- The price elasticity of demand is represented mathematically as follows:

Price Elasticity of Demand (PED) = % change in quantity demanded / % change in price

- **Price elasticity of demand, or PED, is always negative.** To put it another way, it indicates that the price and demand have an inverse relationship.
- A PED value less than one indicates generally inelastic demand, whereas a number greater than one indicates highly elastic demand.

Example of Price Elasticity of Demand

- As a general rule, a product is said to be elastic if the amount required or purchased fluctuates more than the price changes. (For example, if the price increases by 5%, while demand decreases by -10%).
- The product is said to have unit (or unitary) price elasticity if the change in quantity purchased is the same as the price change (for example, 10% /10% = 1).
- Finally, the product is said to be inelastic if the quantity purchased

changes less than the price (for example, -5 per cent demanded for a +10 per cent price shift).

- Consider the following scenario to determine demand elasticity: Assume that the price of apples decreases by 6%, from $1.99 per bushel to $1.87 per bushel. As a result, grocery shoppers have increased their apple purchases by 20%. As a result, the elasticity of apples is 0.20/0.06 = 3.33. Apples have a high degree of elasticity in demand.

3.2 Conclusion

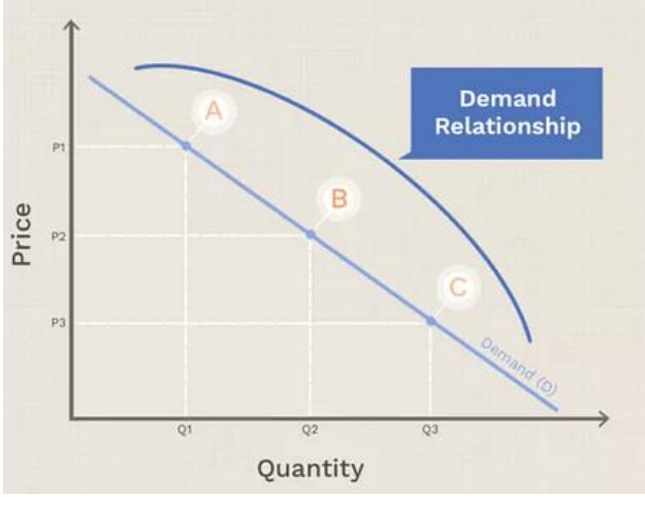
The price elasticity of demand measures how a change in the price of a product affects the demand for that product. This will in understanding the behaviour of goods in the economy and what a demand and supply mismatch can result into.

4. Giffen Goods

A Giffen good is an economic concept that describes a good that individuals consume more of as the price rises. As a result, a Giffen good has an upward-sloping demand curve, which is in violation of the fundamental law of demand. The term "Giffen goods" was coined in the late 1800s and is named after **Sir Robert Giffen, a well-known Scottish economist, statistician, and journalist.** It's worth noting that while all Giffen goods are inferior, not all inferior goods are Giffen.

4.1 What is a Giffen Good?

- **A Giffen good is a low-cost, non-luxury item that contradicts conventional economic and consumer demand theories.** When the price of Giffen goods rises, demand rises, and when the price lowers, demand declines.
- This produces an upward-sloping demand curve in econometrics, in contrast to the fundamental rules of demand, which produce a downward-sloping demand curve.
- The term "Giffen goods" was coined in the late 1800s and is named after **Sir Robert Giffen, a well-known Scottish economist, statistician, and journalist.**
- Giffen goods is a concept that focuses on low-cost, non-luxury products with few close replacements.
- Giffen products are related to Veblen goods, which defy normal economic and consumer demand theory but are more focused on luxury goods.



- **Bread, rice, and wheat** are examples of Giffen products. These items are basic needs with few near-dimensional replacements available at comparable prices.
- Giffen goods are unusual in economics since their supply and demand are in direct opposition to conventional wisdom.
- Multiple market variables, such as supply, demand, pricing, income, and substitution, can result in Giffen goods. The basic theories of supply and demand economics all rely on all of these variables.
- The effects of these variables on low-income, non-luxury items, which result in an upward sloping demand curve, are studied in Giffen goods situations.

4.2 Conditions for a Giffen Good

- The good must be inferior
- The good must form a large percentage of total consumption
- There must be a lack of close substitute goods

4.3 Giffen Goods vs. Veblen Goods

- Both Giffen and Veblen goods are **out-of-the-ordinary items** that defy supply and demand rules.
- The demand curve for both Giffen and Veblen items is upward sloping. As previously noted, income and substitution are important aspects in explaining the econometrics of the upward sloping demand curve for Giffen products.
- **Veblen goods** have an upward sloping demand curve as well, but with notable differences in the influences.
- Veblen products are high-end, luxury items. Perfumes promoted by celebrities or premium wines are two examples.
- The high price of these commodities is associated with a high social status symbol. As a result, these things are more desirable to high-income consumers at a greater price.
- Because income isn't a factor in these commodities, the income effect has little influence. Because the commodities are primarily status symbols and not cross-dimensional, substitution is also a minor factor.

4.4 Conclusion

- A Giffen good is a low-cost, non-luxury item whose demand rises as the price rises, and vice versa.
- The demand curve for a Giffen good is upward-sloping, in contrast to

the fundamental principles of demand, which are based on a downward-sloping demand curve.

- The lack of close substitutes and income pressures has a big impact on Giffen's demand.
- Veblen goods are similar to Giffen goods, except they are more upscale.

5. Veblen Goods

A Veblen good is a good for which demand increases as the price increases, because of its exclusive nature and appeal as a status symbol. The demand curve for a Veblen good is upward-sloping, as opposed to the conventional downward-sloping curve. In contrast to a Giffen good, which is an inferior product with no readily available substitutes, a Veblen good is often a high-quality, valued commodity. The UPSC Indian Economic Syllabus includes Veblen Goods which is described in this article.

5.1 What are Veblen Goods?

- When the price of a good rises, demand rises as well, and vice versa.
- **Diamonds, for example, are a luxury item whose attraction** is based on their high price. It is named after Thorstein Veblen, an American economist.
- In recent years, the **flagship smartphones** prices have increased causing its demand as well to increase like the **iPhones, Samsung Galaxy Fold.**
- Veblen goods are regarded as exceptions to the law of demand, which holds that as a good's price rises, so does its demand, and vice versa.
- Some economists disagree, claiming that the law only applies to absolutely comparable commodities.
- When compared to pricey diamonds, for example, cheap diamonds may appear to be a lesser good in the perspective of the consumer; thus, they are not genuinely comparable.

5.2 Veblen Goods vs. Giffen Goods

- Another class of items that do not precisely follow the law of demand is Giffen goods. Unlike Veblen products, which defy the law of demand once prices reach a certain point, Giffen goods defy the law of demand until prices reach a particular point.
- Furthermore, Giffen products have a negative income effect. A positive relationship exists between the price of a Giffen good and the amount required of the good.

5.3 Conclusion

- A Veblen good is one for which demand rises in tandem with price rises.
- Veblen goods are often high-end, well-made items that are exclusive and serve as a status symbol.
- Affluent consumers who place a priority on the usefulness of a product are more likely to seek for Veblen goods.

Chapter 3: Sectors of Economy

1. Sectors of Indian Economy

India is expected to be the world's second-largest economy by 2050. **Sectors of the Indian economy** are divided into three main sectors: **agriculture, manufacturing, and service.** According to the most recent **'World Economic League Table 2020'** report, India has surpassed both **France and the United Kingdom** to become the **world's fifth-largest economy in 2019.**

1.1 Economic Sectors

- Economic activities produce commodities and services, whereas sectors are groups of economic activity classified according to certain characteristics.
- On the basis of ownership, labour conditions, and the nature of the operations, the Indian economy can be divided into numerous sectors.
- When we produce a good by utilizing natural resources, we are engaged in **primary sector activity.**
- The **secondary sector** encompasses activities in which natural products are transformed into other forms via manufacturing methods associated with industrial activity.
- Following the primary and secondary sectors, there is a third category of activities that falls under the **tertiary sector** and is distinct from the first two. These are activities that contribute to the growth of the primary and secondary sectors.

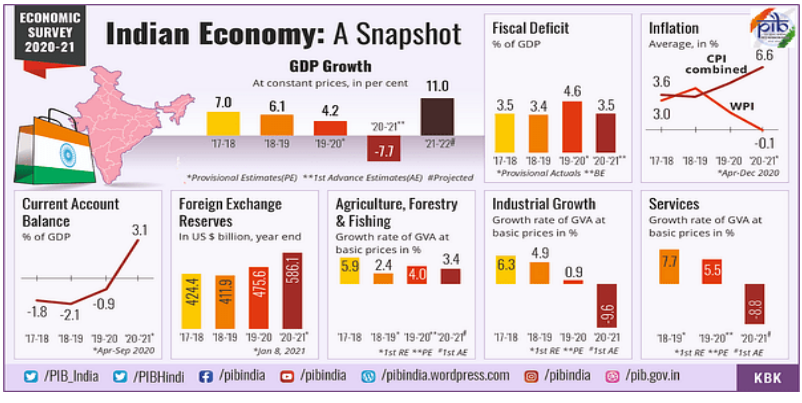


FIGURE 22.1: INDIAN ECONOMY: A SNAPSHOT

- During the early stages of civilization, the primary sector accounted for all economic activity. People's demand for other items grew as a result of the surplus food production, resulting in the growth of the secondary sector.
- During the nineteenth century's industrial revolution, the secondary sector expanded its significance.
- To facilitate industrial activities, a support system was required. Certain industries, such as transportation and finance, were critical in sustaining industrial activity.

1.2 Bifurcation of India's Economic Sectors

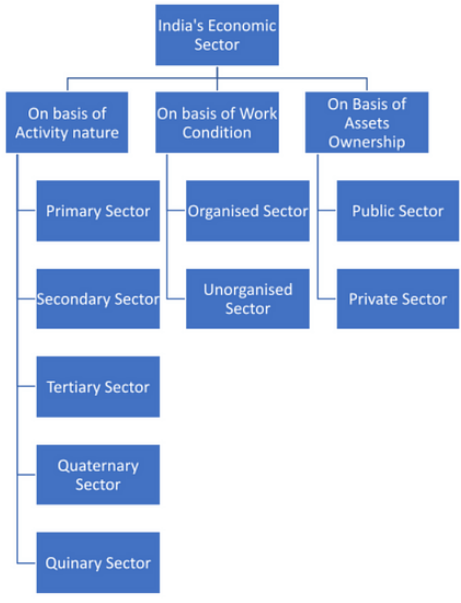


FIGURE 22.2: BIFURCATION OF INDIA'S ECONOMIC SECTORS

1.3 On the Basis of Activity Nature

1.3.1 *Primary Sector*

- Activities in the primary sector of the economy are carried out by utilizing natural resources directly. Agriculture, mining, fishing, forestry, dairy, and other industries fall into this category.
- It is thus named because it serves as the foundation for all other items.
- About **54.6 percent** of the total workforce in the country is still engaged in agricultural and allied sector activities (Census 2011) which accounts for approximately **17.8 percent** of the country's Gross Value Added (GVA) for the year 2019-20 (at current prices).

- It is also known as the **Agriculture and Allied Sector** since agriculture, dairy, forestry, and fishing provide the majority of the natural items we consume.
- Due to the nature of their profession, people who engage in primary activities are referred to as **red-collar employees.**
- While the difficulties created by COVID-induced lockdowns adversely affected the performance of the non-agricultural sectors, the agriculture sector came up with a robust **growth rate of 3.4 percent at constant prices** during **2020-21.**

Table 1: SHARE OF AGRICULTURE AND ALLIED SECTORS IN TOTAL GVA AT CURRENT PRICES

Items	***Year***					
	2014-15	***2015-16***	***2016-17****	***2017-18#***	***2018-19#***	***2019-20#***
Share of GVA of Agriculture & Allied Sector in GVA of Total Economy (per cent)	18.2	17.7	18.0	18.0	17.1	17.8
Share of Crops	11.2	10.6	10.6	10.4	9.4	NA
Share of Livestock	4.4	4.6	4.8	5.1	5.1	NA
Share of Forestry & logging	1.5	1.5	1.5	1.4	1.3	NA
Share of Fishing & aquaculture	1.0	1.1	1.1	1.2	1.2	NA

1.3.2 *Secondary Sector*

- It covers industries that manufacture finished goods from natural materials harvested in the primary sector.
- This sector includes operations such as industrial production, cotton fabric manufacture, sugar cane production, and so on.
- As a result, rather than producing raw materials, it is the sector of a country's economy that manufactures goods.
- This sector is often known as the **industrial sector** because it is involved with various types of industries.
- **Blue-collar employees** are those who engage in secondary activities
- As per the latest estimates on **Gross Value Added (GVA)**, the industrial sector is expected to record a growth of **-9.6 percent** with an overall **contribution in GVA of 25.8 percent in 2020-21 (FY21).**
- The contribution of the industrial sector has been constantly declining since 2011-12.
- The fall in share is across the board except in the case of **'Electricity, gas, water supply & other utility services'** whose share in GVA has increased from 2.3 percent in FY12 to 2.7 percent in FY21.

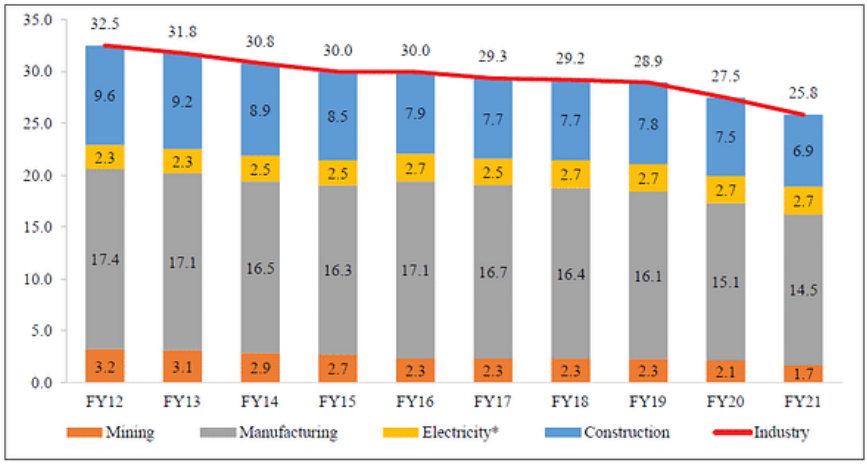


FIGURE 1: SHARE OF INDUSTRY AND ITS COMPONENTS IN GVA (CURRENT PRICES, PER CENT)

TABLE 1: RATE OF GROWTH OF GVA IN INDUSTRY AND ITS COMPONENTS (PER CENT)

	FY13	*FY14*	*FY15*	*FY16*	*FY17*	*FY18*	*FY19*	*FY20*	*FY21*
Industry	3.3	3.8	7.0	9.6	7.7	6.3	4.9	0.9	-12.6
Mining	0.6	0.2	9.7	10.1	9.8	4.9	-5.8	3.1	-9.6
Manufacturing	5.5	5.0	7.9	13.1	7.9	6.6	5.7	0.0	-12.4
Electricity*	2.7	4.2	7.2	4.7	10.0	11.2	8.2	4.1	-9.4
Construction	0.3	2.7	4.3	3.6	5.9	5.0	6.1	1.3	2.7

1.3.3 *Tertiary Sector/Service Sector*

- The services sector's significance in the Indian economy has been steady, with the sector now accounting for over **54 percent of the economy** and almost **four-fifths of total FDI inflows.**
- The activities of this sector contribute to the growth of the primary and secondary sectors.
- Economic activities in the tertiary sector do not produce things on their own, but they do help or assist production.
- The sector includes goods transported by trucks or trains, as well as banking, insurance, and finance.
- It adds value to a product in the same way that the secondary sector does.
- These sector jobs are called **white-collar jobs.**
- The first half of FY 2020-21 saw services sector **contract by** almost **16 percent YoY.**

- This decline was led by a **sharp contraction** in all sub-sectors particularly **'Trade, hotels, transport, communication & services related to broadcasting,** which contracted by **31.5 percent in H1 FY 2020-21.**
- As per the first advance estimates, the Gross Value Added (GVA) of the services sector is estimated to **contract by 8.8 percent in 2020-21**, whereas it grew by 5.5 percent in 2019-20.
- Interestingly, in spite of the global disruptions, **FDI inflows** into the services sector **increased by 34 percent YoY** during April-September 2020 to reach **US$ 23.61 billion.**

Table 1: SERVICES SECTOR PERFORMANCE IN INDIA'S GVA

Sector	***Share in GVA (per cent)***	***Growth (per cent YoY)***					
	2020-21 (AE)	***2018-19 (1st RE)***	***2019-20 (PE)***	***2020-21 (AE)***	***2020-21 (H1)***	***2020-21 Q1***	***Q2***
Total Services (Excluding construction	54.3	7.7	5.5	-8.8	-15.9	-20.6	-11.4
Trade, hotels, transport, communication & services related to broadcasting	15.4	7.7	3.6	-21.41	-31.5	-47.0	-15.6
Financial, real estate & professional services	22.2	6.8	4.6	-0.82	-6.8	-5.3	-8.1
Public administration, defence & other services	16.7	9.4	10.0	-3.68	-11.3	-10.3	-12.2

Why did India shift from the primary sector to the services sector and not the secondary sector?

- A country's normal economic path is from agrarian to industrial to a service economy, but India has jumped ahead of the curve from agrarian to service economy.
- Diversification towards services has been a notable element of India's recent prosperity, with the services sector accounting for the majority of GDP.

- India has become a prominent services exporter thanks to its success in software and IT-enabled services (ITeS), with its share of global services exports rising from 0.6 percent in 1990 to 3.3 percent in 2013.
- Other factors for the country's quick expansion in the service industry include well-educated and vast human resources, fluency in English, and the availability of cheap labor.
- On the other hand, low growth in the Secondary sector can be attributed to:
    - The license Raj
    - Restrictions on foreign investment
    - Lack of measures to promote private industry
    - Power Deficit
    - Stringent Labour laws
    - Lack of skilled labour
    - Delays in Land Acquisition and environmental clearances
    - Import of cheap manufactured goods etc.
- Despite its low per capita income, India's percentage of GDP from services is approaching the worldwide norm. However, unlike the global average, the contribution of services to employment was much lower.
- Because the manufacturing sector is labour-intensive, greater emphasis on manufacturing through initiatives such as 'Make in India' would help to remedy this anomaly and increase employment in line with GDP growth.

1.3.4 *Quaternary Sector*

- These are specialised tertiary operations in the **'Knowledge Sector,'** therefore thus require their own classification.
- The intellectual side of the economy is the quaternary sector. It is the procedure that allows entrepreneurs to innovate and increase the economy's service quality.
- This category includes employees who work in office buildings, elementary schools, and university classrooms, hospitals and doctors' offices, theatres, accounting, and brokerage firms.
- Quaternary activities, like other tertiary functions, can be outsourced.

1.3.5 *Quinary Sector*

- The quinary sector is the segment of the economy that makes the highest-level decisions.

- This includes the government, which is in charge of enacting legislation. It also includes the most powerful decision-makers in industry, trade, and education.
- These are services that focus on the development, reorganisation, and interpretation of new and existing ideas, as well as data interpretation and the use and evaluation of new technology.
- Senior business executives, government officials, research scientists, financial and legal consultants, and other professionals in this category are often referred to as **'gold collar' professionals.**
- They represent another subdivision of the tertiary sector, representing special and highly paid skills of senior business executives, government officials, research scientists, financial and legal consultants, and others.

1.4 On the Basis of Work Condition

1.4.1 *Organised Sector*

- In this industry, employment terms are set and consistent, and employees are guaranteed work and social security.
- It can also be characterised as a sector that is registered with the government and is subject to a variety of laws. The organised sector includes schools and hospitals.
- Workers in the organised sector have more job security. They are only required to work a set amount of hours. If they work longer hours, the company must compensate them with overtime pay.

1.4.2 *Unorganised Sector*

- A home-based worker, a self-employed worker, or a wage worker in the unorganised sector is considered an unorganised worker, as is a worker in the organised sector who is not covered by any of the welfare schemes listed in Schedule-II of the **Unorganized Workers Social Security Act, 2008**.
- Due to the transient and seasonal nature of employment and the dispersed placement of businesses, wage-paid labour in this sector is typically non-unionized.
- Low wages, insecure and irregular employment, and a lack of protection from legislation or trade unions characterise this industry.
- The unorganised industry relies primarily on labour-intensive and locally developed technology.
- Workers in the unorganised sector are so dispersed that the legislation's execution is woefully inadequate and ineffectual. In this industry, there are few unions to function as watchdogs.

- However, as compared to the organised sector, the unorganised sector makes a significant contribution to **national income**.
    - It **contributes more than 60% of national income**, whereas the organised sector contributes about half of that, depending on the industry.

1.5 On the Basis of Assets Ownership

1.5.1 *The Public Sector*

- The government owns the majority of the assets in the sector, and it is the segment of the economy responsible for providing various governmental services.
- The public sector does not exist solely to make money. Governments raise funds through taxes and other means to cover the costs of the services they provide.

1.5.2 *The Private Sector*

- Asset ownership and service delivery are in the hands of private individuals or organisations in the private sector.
- It is also known as the **citizen sector**, and it is administered by private persons or groups, usually for profit, and is not governed but regulated by the government.
- The private sector's activities are guided by the desire to make money. We must pay money to these persons and companies in order to obtain such services.

1.6 Conclusion

The primary sector, secondary sector, and tertiary sector are the three most important sectors in the Indian economy. When it comes to activity style, the Indian economy can be divided into two sections or sectors: the unorganised sector and the organised sector. Again, the Indian economy can be divided into two sections or sectors in terms of proprietorship or ownership: the private sector and the public sector.

2. Primary Sector

The **primary sector of the economy** uses **natural resources** directly for its livelihood. For e.g. **Agriculture, forestry, and fishing, as well as mining and oil and gas extraction, etc.** The secondary sector, which produces manufactured and other processed commodities, and the tertiary sector, which produces services, are in contrast. The UPSC Indian Economic Syllabus includes Primary Sector which is described in this article.

2.1 Primary Sector of the Economy

- The primary sector will comprise the majority of the economy in less developed countries. Increased labour productivity allows workers to quit the agriculture sector and shift to other sectors such as manufacturing and services as an economy develops.
- Agricultural production employs roughly 3% of the workforce in the United Kingdom.
- Agriculture, mining, and extractive sectors make for about 12% of GDP in the United Kingdom.
- Manufacturing accounts for around 10% of GDP, while the service sector accounts for 78%. (Weighted GDP statistics for the United Kingdom)
- Activities in the primary sector of the economy are carried out by utilising natural resources directly. Agriculture, mining, fishing, forestry, dairy, and other industries fall into this category.
- It is thus named because it serves as the foundation for all other items. It is also known as the **Agriculture and Allied Sector** since agriculture, dairy, forestry, and fishing provide the majority of the natural items we consume.
- Due to the nature of their profession, people who engage in primary activities are referred to as **red-collar employees.**

Examples of Primary Sector

1. Farming
2. Fishing
3. Coal mining
4. Forestry and logging
5. Oil extraction
6. Diamond mining

2.2 Advantages

- Many developing economies' main comparative advantage will be in primary product production.
- The industry grows to be a significant source of economic growth, employment, tax revenue, and export earnings.
- Countries would suffer if primary products were not available.
- In developing economies, there is a **large and flexible supply of labour** willing and able to work in these industries.
- It does not necessitate costly investment or borrowing to finance investment. Local workers can manage the industries.
- Developing economies that have attempted to transition to manufacturing have not always been successful due to a lack of infrastructure, education, and human capital.
- It is an important source of **foreign currency** and **export revenue.**
- **Foreign direct investment** may be attracted. China has been investing in Central Africa to improve raw material access.
- This has included the construction of roads and railways – infrastructure that will benefit the economy in ways other than exporting primary products.
- Primary product industries can serve as a springboard for economic development if export earnings are reinvested in various aspects of economic infrastructure.

2.3 Issues

2.3.1 *Export Revenue*

- Natural resources can be used to generate income and export money for a country's economy.
- Many developing economies have benefited from the sale of oil, gas, and other natural resources, allowing them to obtain funds to invest in public services.
- Qatar, Saudi Arabia, and Norway, for example, have successfully utilised the boost in revenue to save for the future.

2.3.2 *Monopoly power*

- One issue with relying on the primary sector is that wealth is frequently distributed unequally.
- For example, a small number of companies establish monopoly power over the manufacturing of raw materials and pay their employees only a small portion of the profit.
- Despite having abundant raw supplies, many African developing countries have remained impoverished. A substantial primary sector is insufficient to drive economic development on its own.

2.3.3 *Volatility*

- Primary products are prone to price and output volatility. Oil and consumables, for example, can see substantial price changes.
- Demand tends to be quite price inelastic. If prices decline, countries that rely on a single industry may face a significant drop in revenue, producing problems.
- The EU continues to provide major subsidies and price assistance to EU agriculture.

2.3.4 *Deindustrialization*

We have witnessed a drop in primary sectors in developed economies, and as they take a lower percentage of the economy, this can lead to structural unemployment for a period of time.

2.3.5 *Dutch Disease*

- If primary products are highly profitable, resources will be diverted from other manufacturing industries and concentrated solely on primary industries.
- The issue is that when raw materials become scarce or the industry declines, the economy lacks broad diversification.

- This is referred to as the **"Dutch disease"** or **"resource curse."**

2.4 Conclusion

Primary activities are directly dependent on the environment since they involve the use of natural resources such as land, water, vegetation, construction materials, and minerals. Hunting and gathering, pastoral activities, fishing, forestry, agriculture, and mining and quarrying are all included in this category. Due to the nature of their profession, people who engage in primary activities are referred to as red-collar employees.

3. Secondary Sector

The **secondary sector** of the economy comprises businesses that produce a finished, useful product and depend on primary sector companies for raw materials. **Mining, manufacturing, and construction** are all part of this industry. The secondary sector contributes **24% of the share** in the Indian economy. The UPSC Indian Economic Syllabus includes the Secondary Sector which is described in this article.

3.1 What is the Secondary Sector?

- The manufacture of finished items is a function of the secondary sector of the economy.
- This sector encompasses **all manufacturing, processing, and building operations**. Metalworking, vehicle manufacture, textile production, shipbuilding, and other activities are all part of this industry.
- Most economies go through a middle period of development during which the secondary sector overtakes the primary sector in terms of production and employment, while the primary sector declines in prominence.
- India, on the other hand, is an exception in that we have jumped right into developing the services industry without first enhancing our industrial capabilities.
- Manufacturing is the process of creating items from raw materials. Manufacturing literally means "to produce by hand," but it now also refers to the production of goods by machines.
- Specialization of skills and techniques of production, mechanisation, technical innovation, organisational structure, and uneven geographical distribution, with the majority of manufacturing units concentrated in a few regions, are all significant elements of modern large-scale manufacturing.

3.2 Classification of Industries

Manufacturing industries are classified on the basis of their output/products, ownership, size and inputs/raw materials.

3.2.1 *Industries Based on Size*

3.2.1.1 *Household Industries or Cottage Manufacturing*

- It is the smallest unit of production. The artisans manufacture everyday things in their homes with the support of family members or part-time labour, using local raw materials and modest tools.

- The finished products may be used in the same household, sold in local (village) marketplaces, or bartered.
- Because this sort of production has a limited commercial significance and most of the tools are designed locally, capital and transportation have little influence.

3.2.1.2 *Small Scale Manufacturing*

- Small-scale manufacturing differs from household businesses in terms of production processes and location (a workshop outside the producer's home/cottage).
- Local raw materials, simple power-driven machines, and semi-skilled labour are used in this sort of manufacturing.
- It creates jobs and boosts the purchasing power of the local community.
- As a result, countries such as India, China, Indonesia, and Brazil have established labour-intensive small-scale manufacturing to offer jobs for their citizens.

3.2.1.3 *Large Scale Manufacturing*

- A large market, different raw materials, enormous energy, specialised labour, modern technology, assembly-line mass production, and large capital are all involved in large-scale manufacturing.

3.2.1 *Industries Based on Inputs/Raw Materials*

3.2.1.1 *Agro-based Industries*

- The processing of raw resources from the field and farm into finished products for rural and urban markets is known as **agro-processing**.
- Food processing, sugar, pickles, fruits juices, beverages (tea, coffee, and chocolate), spices and oils, fats and textiles (cotton, jute, silk), rubber, and other agro-processing businesses are among the most important.

3.2.1.2 *Mineral-based Industries*

- Minerals are used as a raw material in these industries.
- Some businesses, such as the iron and steel industries, employ ferrous metallic minerals that contain ferrous (iron), whereas others, such as the aluminium, copper, and jewellery industries, use non-ferrous metallic minerals.
- Non-metallic minerals are used in a variety of industries, including cement and ceramics.

3.2.1.3 *Chemical-based Industries*

- Natural chemical minerals are employed in these industries, such as mineral-oil (petroleum) in the petrochemical industry.
- Natural minerals are also used in the salt, sulphur, and potash industries.
- Wood and coal are also used as raw materials in the chemical industry.
- Chemical-based businesses include synthetic fibre, plastic, and others.

3.2.1.4 *Forest-based Raw Material using Industries*

- Many big and small goods that are used as raw materials can be found in the forests.
- Forests provide timber for the furniture industry, wood, bamboo, and grass for the paper industry, and lac for the lac industries.

3.2.1.5 *Animal-based Industries*

- Animals provide leather for the leather industry and wool for woollen goods.

3.2.2 *Industries Based on Ownership*

- Governments own and oversee the **public sector industries**. There are a number of Public Sector Undertakings in India **(PSUs)**.
- Many state-owned industries exist in socialist countries. Both public and private sector businesses exist in mixed economies.
- Individual investors own the **private sector industries**. Private organisations are in charge of these. The majority of industries in capitalist countries are privately owned.
- **Joint Sector Industries** are controlled by joint-stock corporations, or the private and public sectors collaborate to create and operate them.

3.3 Factors Affecting Industrial Locations

Modern manufacturing has flourished in a small number of locations that account for less than ten percent of the worldwide geographical area. Because corporations' goals are to maximise profits, industry locations are frequently chosen in such a way that production expenses are kept to a minimum. The following are the factors that determine industrial location:

3.3.1 *Access to Market*

- The most essential factor in the location of industries is the existence of a market for manufactured goods.
- People who have a demand for these things and also have the purchasing

power (ability to buy) to buy from the vendors at a location are referred to as **"market."**

- Small markets can be found in remote places where only a few people live.

3.3.2 *Access to Raw Material*

- Industries should employ low-cost, easy-to-transport raw materials.
- Steel, sugar, and cement businesses, for example, are dependent on inexpensive, bulky, and weight-losing material (ores) and are located near raw material sources.

3.3.3 *Access to Labour Supply*

- Industry location is influenced by the availability of labour. Some manufacturing processes still require expert labour.
- Industrial processes have become more mechanised, automated, and flexible as a result of increased mechanisation, automation, and flexibility.

3.3.4 *Access to Sources of Energy*

- Industries that consume more energy, such as the aluminium sector, are placed near the source of energy.
- Although coal was once the primary source of energy, hydroelectricity and petroleum are now key sources of energy for a variety of businesses.

3.3.5 *Access to Transportation and Communication Facilities*

- For the development of industries, quick and effective transportation infrastructure are required to deliver raw materials to the plant and finished items to the market.
- The cost of transportation has a significant impact on where industrial units are located.

3.3.6 *Government Policy*

- Governments implement regional policies in order to foster 'balanced' economic development and, as a result, establish industries in specific areas.

3.3.7 *Access to Agglomeration Economies/ Links between Industries*

- Nearness to a leader-industry and other industries benefits several industries. **Agglomeration economies** are the name given to these advantages.

- Savings are obtained through the interconnections that exist between various sectors.

3.4 Advantages

- Secondary industries have contributed to the creation of job opportunities. After farming, it employs the greatest number of people.
- The finished products in our homes are the result of this sector's manufacturing and production processes. These items have aided in making our lives easier.
- Secondary industries have contributed to a country's growth and prosperity. People are more likely to pay more taxes when they have enough. The government spends this amount on the well-being of its citizens.
- Industrialization is the result of secondary industries, and it has resulted in fewer imports and an increase in exports. This promotes higher income through foreign exchange, making the country more prosperous.
- It aids countries in benefiting and specialising from economies of sale.

3.5 Disadvantages

- The most serious disadvantage of secondary industries is that they have increased pollution to unimaginable levels.
- The poisonous gas emitted over time has been a major contributor to global warming. Our rivers are being polluted by waste materials.
- Secondary industries typically attract workers due to job opportunities and higher pay.
- Workers' base has shifted from rural to urban areas, which can lead to issues such as a lack of proper housing, basic amenities, and a variety of health issues.
- Workers prefer to work in the secondary sector rather than the primary sector because the money and opportunities are greater in the secondary sector.
- This is causing a void that may result in a labour shortage in the agricultural sector.
- The vast disparity between rich and poor is attributed to secondary industries, which make rich people richer and poor people poorer.

3.6 Conclusion

- The manufacture of a final, usable product is the responsibility of India's secondary sector. For the procurement of raw materials for

use in the product development process, this sector is heavily reliant on the primary sector.

- The available natural raw materials are exploited to generate goods and services for consumption.
- The numerous government policies and plans are designed to promote the economy's industries with the goal of reaching production self-sufficiency.
- Production self-sufficiency is critical because it protects the economy from international competition.

4. Tertiary Sector

The **Tertiary sector**, which includes the **service industry,** is the most important of all sectors. The tertiary sector of the economy is responsible for providing services to both businesses and final consumers. Services can include the **transportation, distribution, and sale of commodities from a producer to a customer, as in wholesaling and retailing**, or providing of a service, as in pest treatment or entertainment. The UPSC Indian Economic Syllabus includes Tertiary Sector which is described in this article.

4.1 What is the Tertiary Sector?

- The tertiary sector makes the **most contribution to India's GDP** (more than 50percent).
- Because it provides services to all current firms and final consumers, the tertiary sector is often known as the **service industry**.
- Distribution, transportation, and the selling of goods from producers to consumers are all examples of services, as are retailing, wholesaling, and even information technology, insurance, finance, transportation, and entertainment.
- The tertiary sector gains considerably from higher production in the first two sectors.
- This industry is critical because individuals demand specific services to live a pleasant and high-quality existence.

Tertiary Sector

4.2 More about the Tertiary Sector of the Indian Economy

- Medical amenities, transportation facilities, financial facilities, technical facilities, communication facilities, and so on are always in demand.
- The tertiary sector's productivity is primarily reliant on creative innovations and scientific research.
- More than 80% of the population in industrialized economies is employed in the service industry.
- The IT business is booming as a result of the abundant supply of highly skilled English-speaking people who can be hired at a low cost.

The tertiary sector is made of;

- The **market services sector** (trade, transportation, financial operations, business services, personal services, accommodation, and food service activities, real estate, and information and communication);
- The **non-market services sector** (public administration, education, human health, social work activities).

Examples of Tertiary Sector;

1. Trade, Hotels, and Restaurants
2. Real estate and Business services
3. Transport, Storage, and Communication
4. Financial services such as Banking, Insurance, etc.
5. Real estate and Business services
6. Public Administration
7. Other services.

4.3 Advantages

- One of the primary benefits of the tertiary sector is that it has a much lower barrier to entry than starting a physical product-based business.
- They often do not have inventory and do not need to worry about manufacturing products.
- It enables local marketing and one does not have to compete with the retail industry's franchises and corporations.
- They can respond to changing customer needs much faster than product-based businesses.
- In times of economic crisis or downturn, it can provide faster and more flexible adjustment.
- It reduces environmental damage caused by heavy industry.

- It allows for more rapid economic development than the traditional pattern.
- It reduces the use of materials and energy.
- It aids in knowledge advancement.
- More customer-focused products to ensure their satisfaction.

4.4 Disadvantages

- More reliance on other countries for goods.
- The trade deficit has grown as a result of increased imports and decreased exports of goods.
- Product outsourcing has resulted in the loss of manufacturing jobs.
- More skilled workers and employees are required.

4.5 Conclusion

- A country's economy cannot be entirely based on services. However, a service economy is a sign of the country's economic growth and development, and it demonstrates the economy's strength.
- From commerce to administration, transportation, financial and real estate activities, business and personal services, education, health, and social work, the tertiary sector includes a wide range of activities.

5. Quaternary and Quinary Sector

The **Quaternary sector** includes all industries that are concerned with the creation and distribution of knowledge. This sector emerged a few years ago as an additional tertiary sector distinction. For example, **research and development, education**, and so on.

The **Quinary sector** is the segment of the economy that **makes the highest-level decisions.** This includes the **government**, which is in charge of enacting legislation. It also includes the most powerful decision-makers in industry, trade, and education.

The UPSC Indian Economic Syllabus includes the Quaternary Sector and Quinary Sector which is described in this article.

5.1 What is the Quaternary Sector?

- The **intellectual side of the economy** is said to be represented by the **quaternary sector.** It encompasses **education, training, technological advancement, and research and development.**
- It is the process that allows entrepreneurs to improve manufacturing processes and the quality of services provided in the economy by innovating better manufacturing processes.
- Economic progress would be slow or non-existent without the advancement of technology and knowledge.
- It is also known as the **knowledge economy**, which refers to the part of the economy that is reliant on human capital, such as information technology, knowledge, and education.
- It's mostly about the service industry, but it's also about the high-tech component of manufacturing.
- This category includes employees who work in office buildings, elementary schools, and university classrooms, hospitals and doctors' offices, theatres, accounting, and brokerage firms.

5.1.1 *Advantages*

- It enables a specialized space in which entrepreneurial thinking is essential. This area is used by individuals to identify and develop new products.
- This sector allows countries to focus on developing new ways to support the other sectors.
- The specialised sector allows the workforce to advance their skills to a higher level. It enables consultants, for example, to work in a higher knowledge field while also supporting existing structures.

- The Quaternary Industry devotes a significant amount of time to improving existing knowledge systems in the information technology environment.
- Large-scale corporations typically make significant investments to ensure the development of the Quaternary Industry.

5.1.2 *Disadvantages*

- It remains a highly specialized environment that tends to decline during economic downturns.
- That is, it does not provide you with food but rather focuses indirectly on new methods of planting seeds more successfully.
- This industry employs highly skilled individuals and necessitates significant investment to compensate these specialized individuals.
- The Quaternary Industry is a **white-collar field** with a limited number of job opportunities.

5.2 What is the Quinary Sector?

- Some economists say that the quinary sector of the industry includes **health, education, culture, research, police, fire service, and other government-run businesses** that are **not intended to generate a profit.**
- These businesses are usually found in the tertiary or quaternary sectors. Despite the inference, it is not a direct replacement for the quarternary industry, as it only requires a population base and the taxation of other profitable business sectors.
- These are services that concentrate on the production, reorganisation, and interpretation of new and existing ideas, as well as data interpretation and the use and evaluation of new technology.
- Senior business executives, government officials, research scientists, financial and legal consultants, and other professionals in this category are often referred to as **"gold collar" professionals.**
- They are a subset of the tertiary sector that represent special and highly compensated skills of senior business executives, government officials, research scientists, financial and legal consultants, and others.
- Their importance in the structure of advanced economies far outweighs their numbers.

5.2.1 *Importance*

- The workers' importance in the structure of advanced economies far outweighs their numbers.

- The fact that the term is not used to evaluate **profit vs. economic basis** is an important feature of the Quinary economic sector.
- Not for profit, but to categorise industries based on the application of knowledge, thereby measuring innovation policies and systems.
- This sector is expected to grow primarily, but not entirely, through public investments.

5.3 Conclusion

These are specialized tertiary activities in the **'Knowledge Sector'** which demands a separate classification. The intellectual side of the economy is the quaternary sector. It is the procedure that allows entrepreneurs to innovate and increase the economy's service quality.

Quinary activities are services that centre on the production, reorganisation, and interpretation of new and existing ideas, as well as data interpretation and the use and evaluation of new technology. Quinary actions are carried out by the highest level of decision-maker or policymakers.

6. Economic System

An **economic system** is a tool that the government uses to plan and distribute accessible services, resources, and commodities across the country. Economic systems combine wealth, labour, physical resources, and business personnel to handle production factors. Many organisations, agencies, products, models, and decision-making methods make up an economic system. The UPSC Indian Economic Syllabus includes the Economic System which is described in this article.

6.1 Types of Economic Systems

6.1.1 *Capitalist economy*

- In a capitalist society, **items are distributed among individuals based on purchasing power,** which is the ability to buy goods and services, rather than on what they want.
- This implies that a person must have sufficient funds to purchase products and services.
- Low-cost housing for the poor is desperately needed, yet there will be little demand in the market because the poor lack the purchasing ability to support it.
- As a result, the goods will not be produced and distributed according to market forces.

6.1.2 *Socialist economy*

- In a socialist society, the **government decides what products will be made** to meet the society's needs.
- It is assumed that the government is aware of what is appropriate for the country's population. As a result, individual purchasers' passions aren't given much consideration.
- The government makes decisions about how items are made and how they are disposed of.
- In theory, sharing under socialism is based on what each individual requires rather than what they can afford.
- Because everything is controlled by the government in a socialist regime, there is no separate estate.

6.1.3 *Mixed economy*

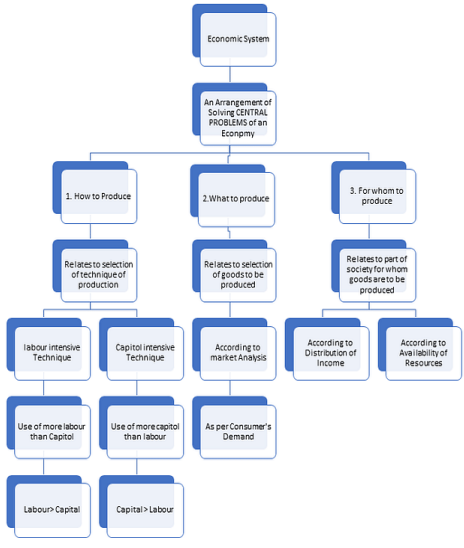
- The characteristics of both the **socialist and capitalist economic systems** can be found in mixed systems.

- Mixed economic systems are also called **dual economic systems** for this reason.
- A genuine approach for determining a mixed system, on the other hand, does not exist.
- In some parts of the economy, the term can refer to a market system that is subject to rigorous administrative regulation.

6.2 Central Problem of Economy

Table 5.1: Differences between Capitalist, Socialist, and Mixed Economies

Parameters	*Capitalist economy*	*Socialist economy*	*Mixed economy*
Ownership of property	Private ownership	Public ownership	Both private and public ownerships
Price determination	Prices are determined by the market forces of demand and supply.	The central planning authority determines prices.	The central planning authority, as well as demand and supply, determine prices.
Motive of production	Profit motive	Social welfare	In the private sector, profit is the motivating factor, while in the public sector, welfare is the motivating factor.
Role of government	No role	Complete role	Full role in the public sector and limited role in the private sector
Competition	Exists	No competition	Exists only in the private sector
Distribution of income	Very unequal	Quite equal	Considerable inequalities exist



6.3 Conclusion

Economies are classified into three models based on the responsibility and structure of the production and distribution network as capitalist, socialist, and mixed economies. Many countries have chosen different models of economic system based on their socio-political systems.

7. Capitalist Economy

In a **capitalist economy,** capital assets, like mines, factories, and railroads, can be privately owned and controlled, labour can be bought for money salaries, capital profits accrue to private owners, and prices allocate capital and labour between competing uses. It is defined as a system characterised by private ownership and the profit-making utilisation of both artificial and natural capital.

Because the **free market decides demand, supply, and price,** the capitalist economy is referred to as a **liberal economy**. The government has no active involvement in this sector. The UPSC Indian Economic Syllabus includes the Capitalist Economy which is described in this article.

7.1 What is Capitalism?

- **Capitalism,** often known as the capitalist economy, is an economic system in which private firms control and govern the factors of production such as **capital goods, labour, natural resources, and entrepreneurship.**
- The production of all commodities and services in a capitalist economy is based on **demand and supply in the market**, often known as a **market economy.**
- It differs from the central planning system, which is also referred to as a **command or planned economy.**
- The primary feature of a capitalist economy is the desire to make money. The presence of open markets and the government's lack of involvement in corporate regulation are also characteristics of the capitalist economy.
- The origins of capitalism may be traced back to 18th century England, which was in the midst of the industrial revolution. This form of economy is also known as a **free-market economy** because there is no government intervention.

7.2 Features of Capitalism

Let us look at some of the key characteristics of capitalism and the capitalist economy.

- **Private property**: Private property is one of the most essential elements of capitalism, as private persons or organisations can possess private properties such as factories, machinery, and equipment.
- **Individual liberty:** Under this system, each person has the freedom to make their own economic decisions without interference. Both consumers and producers can benefit from this.

- **Profit motive:** One of the most significant motivations of a capitalist economy is the desire to make money. In this system, all businesses strive to maximise profits by producing and selling their goods to consumers.
- **Price mechanism:** In this system, market demand and supply decide the volume of production and, as a result, the price is established for the products, with no interference from the government.
- **Customer sovereignty:** In this arrangement, the market is dictated by consumer wants. It governs the degree of production carried out by businesses, although the consumer is free to choose which things to buy.
- **Free trade:** In this system, low tariff barriers exist that promote international trade.
- **Government interference:** In a capitalist economy, the government is not involved in the day-to-day operations of the firm. Customers and producers are free to make their own choices when it comes to products and services.
- **Flexibility in labour markets:** Capitalism allows for a degree of flexibility in the hiring and firing of employees.
- **Ownership freedom:** Under this system, an individual can amass any amount of property and use it as he sees fit. By right of inheritance, the same property is passed on to his successors after his death.

7.3 Advantages of Capitalist Economy

The following are some of capitalism's benefits.

- Economic liberty **promotes political liberty**. When governments own the means of production and set prices, it invariably results in a powerful state and a large bureaucracy that may spread into other areas of life.
- Firms in a capitalist society face **incentives to be efficient and produce in-demand goods.** These incentives put pressure on businesses to cut costs and eliminate waste.
- Capitalism is characterised by a **dynamic** in which entrepreneurs and businesses strive to create and develop profitable products. As a result, they will not remain stagnant, but will instead invest in new products that may be popular with consumers.
- With incentives for firms and individuals to be innovative and work hard, a climate of innovation and economic expansion is created. This contributes to higher real GDP and higher living standards.
- The capitalist economy is more efficient because things are manufactured in response to consumer demand.

- There is less government intrusion and bureaucratic interference.
- As corporations seek to capture a large portion of the market with their goods, there is more room for innovation.
- It prohibits discrimination of any kind so that trade between two parties can proceed without hindrance.

7.4 Disadvantages of Capitalist Economy

- Private capital ownership allows firms to gain monopoly power in product and labour markets. **Monopolistic firms** can use their position to charge higher prices.
- Firms with **monopsony power** pay lower wages to their employees. In capitalist societies, there is frequently a large disparity between those who own capital and those who work for businesses.
- Social benefits are often overlooked.
- A profit-seeking capitalist firm is likely to disregard negative externalities, such as pollution from production, which can harm living standards.
- Similarly, in a free-market economy, goods with positive externalities, such as health, public transportation, and education, will be under-provided.
- Inequality in income is a result of capitalism. Inequitable societies breed resentment and social division.
- A capitalist society argues that it is good for people to be able to earn more money, which leads to income and wealth inequality. This, however, ignores the **diminishing marginal utility of wealth.**
- Firms can gain a monopoly on workers and consumers under capitalism.
- A capitalist economy's high-profit motive is to utilise resources in such a way that it causes environmental concerns by disrupting the natural balance.

Examples of Capitalist Economies

1. Canada
2. Switzerland
3. United Kingdom
4. United States
5. Ireland
6. Hong Kong
7. United Arab Emirates

8. Singapore
9. New Zealand
10. Australia

7.5 Conclusion

- Capitalism is an economic system that relies on a free market to find the most effective resource allocation and price setting based on supply and demand.
- Socialism is frequently portrayed as the polar opposite of capitalism, in which there is no free market and resource distribution is regulated by a central body.
- A two-class structure, private ownership, a profit motive, little government interference, and competition are just a few of capitalism's distinguishing characteristics.

8. Mixed Economy

A mixed economy is an economic system in which **both the government and the private sector exercise control over the economy**. It is the middle path between the capitalistic and socialistic economic systems. A mixed economic system protects private property and allows for some economic freedom in the use of capital, but it also allows governments to intervene in economic activities to achieve social goals. Some of the countries practicing mixed economy are **the United States, the United Kingdom, Iceland, India, and Sweden** among many countries. In this article, we will discuss the mixed economy that is important for the UPSC examination.

8.1 What is a Mixed Economy?

- A mixed economy, as the name implies, is a winning **mixture of a command and a market economy**. As a result, it adheres to both the pricing mechanism and central economic planning and supervision.
- Both private corporations and governmental or state-owned enterprises own the means of production. While market forces determine **pricing, demand, supply**, and other factors, the government maintains some control to avoid **monopolization** and discrimination.
- The goal of a Mixed Economy is to address the flaws of both a capitalist and a socialist economy in order to create a unique system. It values the principle of private property and resource ownership as well as the freedom that comes with it.
- At the same time, it recognizes the dangers of unchecked capitalism. As a result, it advocates government control and economic planning to ensure that the poorest citizens are not discriminated against.

8.2 Features of Mixed Economy

- **Coexistence of All Sectors:** In a mixed economy, all three sectors, namely the private, public, and joint sectors, coexist in peace. The government and private enterprises administer the joint sector together, with the government owning at least 51 percent of the company.
- **Cooperative Sector**: Another sector exists in a mixed economy i.e., the cooperative sector. The primary goal of forming this sector is for the government to offer financial aid to cooperative societies in the warehouse, agricultural, and dairy industries, among other industries.
- Individuals have the **freedom to generate goods and services,** own property, pick their career, and choose or demand the products/ services they desire. However, the state retains some supervision over

monopolistic behaviors and discrimination against the poorer classes.

- **Economic Planning:** We have a central planning body in a mixed economy. To reach various aims and goals, all sectors of the economy follow the state's economic plan. The plan is not set in stone, but rather serves as a basic guideline for the country's economic progress and prosperity.
- **Social Welfare:** Social welfare is one of the fundamental goals of a mixed economy. Its goal is to close the wealth gap in the country and combat societal inequities. Poverty and unemployment are to be reduced. Simultaneously, increase social security, public health care, and the public education system, among other things.

8.3 Mixed Economy - Benefits

- **Private Sector Encouragement:** The most essential benefit of a mixed economy is that it encourages the private sector and gives it the opportunity to flourish. It causes the country's capital creation to rise.
- **Freedom:** In a mixed economy, as in a capitalist system, there is both economic and occupational freedom. Every individual has the freedom to pursue any employment he or she chooses. Similarly, each producer has the ability to make judgments about production and consumption.
- **Optimal Resource Utilization:** In this system, both the commercial and public sectors collaborate to make the most effective use of resources possible. The public sector works for the common good, whereas the private sector makes the best use of these resources in order to maximize profit.
- **Economic Planning Benefits:** In a mixed economy, economic planning has all of its benefits. The government takes steps to address economic instabilities and other economic ills.
- **Lower Economic Disparities:** Capitalism exacerbates economic inequalities, but in a mixed economy, inequalities are more easily addressed by government initiatives.
- **Rivalry and Efficient Production:** The degree of efficiency stays high due to competition between the private and governmental sectors. In the prospect of profit, the components of production operate efficiently.
- **Social Welfare:** Under this system, social welfare is given top priority through sound economic planning. The government has complete authority over the private sector. The private sector's production and pricing practices are geared toward maximizing societal welfare.
- **Economic Development:** Under this system, the government and the private sector work together to construct socio-economic

infrastructures. In addition, the government enacts several legislative measures to protect the interests of the poor and vulnerable. As a result, for any developing country, a mixed economy is the best option.

8.4 Mixed Economy - Demerits

- **Instability:** According to some economists, mixed economies are the most unstable in nature. The public sector reaps the greatest rewards, while the private sector is kept under check.
- **Sector Inefficiency:** Under this arrangement, both sectors are inefficient. The private sector does not have complete independence, and as a result, it is rendered ineffectual. As a result, the public sector becomes ineffectual. Both industries are, in a way, not just competitive, but also complimentary.
- **Ineffective Planning:** In a mixed economy, there is no such thing as comprehensive planning. As a result, the government has no authority over a significant portion of the economy.
- **Efficiencies are lacking in this system**, and both sectors suffer as a result. In the public sector, this is because government personnel does not carry out their responsibilities responsibly, but in the private sector, efficiency suffers because the government imposes too many limitations in the form of controls, permissions, and licenses, among other things.
- **Delays in Economic Choices:** In a mixed economy, certain decisions are usually delayed, especially in the public sector. This sort of lag always creates a significant impediment to the economy's proper operation.
- **Resource Waste:** Another issue with the mixed economic system is resource waste. A portion of the funding given to various public-sector programs ends up in the pockets of middlemen. As a result, resources are squandered.
- **Corruption and Black Marketing:** This system is rife with corruption and black marketing. Political parties and self-interested individuals benefit unduly from the public sector. As a result, numerous evils develop, such as black money, bribes, tax evasion, and other illicit acts. All of these things add to the system's red tape.

8.5 Why India Adopted Mixed Economy?

- After independence, India's **socioeconomic situation made it difficult for either the public or private sectors to shoulder the burden** of development alone.
- To deal with issues such as per capita income, a large portion of the population working in the primary sector, a high birth rate, severe

unemployment, and low capital formation, unequal wealth distribution, illiteracy, a lack of technical knowledge, poor human resource quality, and so on, it became critical to adopt an economic system that could bring about the growth that was conducive to or in relation to the prevailing environment. Thus, India adopted a mixed economy.

8.6 Conclusion

A mixed economic system protects private property and permits some economic freedom in capital allocation, but it also allows governments to intervene in economic activity to achieve social goals. Thus, it is one of the most important economic systems existing in the world.

9. Capitalist and Socialist Economic Systems

Capitalist Economy and **Socialist Economy** are two types of economic systems prevailing in the world. **Capitalism,** often known as the capitalist economy, is an economic system in which private firms control and govern the factors of production such as capital goods, labor, natural resources, and entrepreneurship. The setup of a socialist economy is diametrically opposed to that of a capitalist one. The factors of production in such an economy are all held by the government. This article covers the **difference between Capitalist and Socialist Economies**, which will be useful for UPSC IAS Exam preparation.

9.1 What is a Capitalist Economy?

- A capitalist economy is one in which **private companies** own and controls the means of production.
- Capital goods, natural resources, labor, and other elements of production are among them.
- **Demand and supply** govern the production and consumption of products and services in this economy.
- The capitalist economy is dictated by these **market forces**. In this economy, the primary motivation for manufacturing is to make a profit.
- In a capitalist economy, the government also has a significant lack of engagement. Because each sector/industry has several enterprises, there is a fierce rivalry between them in the economic system.

9.2 What is a Socialist Economy?

- The government is the dominant entity in a socialist economy, and it selects what products and services are created to **meet society's needs**.
- They also have total control over the production elements. In this economy, the primary motivation for **providing goods and services is societal welfare** rather than profit, therefore the requirements and desires of individual buyers are unimportant.
- The **price of goods is controlled by the government** in this form of economy.
- There is no competition in this economic system since the government controls every sector/industry.

Table 8.1: Difference between Capitalist and Socialist Economic Systems

Criteria	*Capitalist Economy*	*Socialist Economy*
Definition	A capitalist economy is one in which private firms control key production components such as labor, natural resources, and capital goods.	A socialist economy is one in which the government controls the elements of production such as labor, natural resources, and capital goods.
Determination of Price	Demand and supply forces determine the pricing of products and services in a capitalist economy.	The pricing of products and services is regulated and controlled by the government in a socialist economy.
Motive of Production	In a capitalist economy, the primary motivation for producing products and services is to make money.	In a socialist economy, the wellbeing of the general population is the primary motivation for creating commodities and services.
Role of Government	When it comes to the production and distribution of goods and services, the government plays a minimal or non-existent role in a capitalist economy.	The government has total control over the production and distribution of goods and services in a socialist economy.
Role of Private Sector	In a capitalist economy, the private sector totally controls the production and distribution of commodities and services.	In a socialist economy, the private sector has no involvement in the production and distribution of products and services.
Competition	In a capitalist economy, competition between different enterprises is a necessary component.	In a socialist economy, the government has no competitors.
Distribution of Income	In a capitalist economy, income distribution is uneven.	In a socialist economy, income distribution is more or less equal.

9.3 Conclusion

There are significant distinctions between a capitalist and a socialist economic system, and they both operate differently. Both of these systems, however, have advantages and disadvantages, and it is up to each country to choose between them.

10. National Income Accounting

National income accounting is a bookkeeping method used by governments to track the level of economic activity in their country through time. Total revenues made by domestic firms, wages given to foreign and domestic workers, and the amount spent on sales and income taxes by corporations and individuals resident in the nation are all examples of accounting records of this type. Here we will discuss in detail National Income Accounting which will be helpful for UPSC Civil Service preparations.

10.1 What is National Income?

- **National Income:** After depreciation, the total worth of final products and services generated by normal residents throughout an accounting year is called the national income.
  - It is **Net National Product (NNP)** At **Factor Cost (FC).**
  - Taxes, depreciation, and non-factor inputs are not included (raw materials).
- **Domestic Income** - After depreciation, the total worth of final products and services generated inside a domestic area within an accounting year is called domestic income.
  - It is **NDP (National Domestic Product)** at Factor Cost.
  - NNP and NDP may be calculated using either constant prices (real income) or market prices (nominal income).
- **Domestic income plus net factor income from abroad (NFIA)** equals national income.

10.2 National Income Accounting

- Although national income accounting is not an exact science, it does give important information about **how well an economy is performing and where money is created and spent**.
- Data on per capita income and growth may be evaluated across time when paired with statistics on the corresponding population.
- The **gross domestic product (GDP), gross national product (GNP), and gross national income (GNI)** are some of the indicators computed using national income accounting.
- The GDP is a frequently used metric for domestic economic research, and it reflects the total market value of goods and services produced in a certain country during a given period of time.

10.3 National Income Accounting in India

The National Economic Growth Rate is determined by computing the National Income Accounting, which may be done in a variety of ways:

10.3.1 *Income Method*

- This technique is concerned with the creation of products and services using capital, land, labour, and other resources.
- Interest, profit, rent, salaries, and other sources of income are all used to create income.
- Mixed-income, which is earned by businessmen and self-employed professionals, is another factor to consider.

Therefore, National Income = Interest + Profit + Rent + Wages + Mixed Income

Example: Calculate the National Income of country X and identify which of the following is not considered while calculating National Income using the Income Method?

- Rent accrued – Rs. 10000
- Salaries – Rs. 20000
- Sale from secondhand goods – Rs. 10000
- Interest earned on Loan – Rs. 20000

Answer: National Income = Interest + Profit + Rent + Wages + Mixed Income

= 10000+20000+20000

= 50000

Here the sale of second-hand goods will not be counted because it's not an income generated from land and labour.

10.3.2 *Expenditure Method*

This strategy takes into account purchases made by governments, residents, businesses, and other entities. The elements are as follows:

- C = Consumer goods and service expenditures by residents and households
- G = Government expenditures on goods and services
- I = Business Organizations' Capital Goods and Stocks Expenses
- NX stands for net exports, which is defined as exports minus imports.

As a result, **national income = C+G+I+NX**

10.3.3 Value Added Method/ Production Method

- The economy is separated into several industries using this strategy, such as transportation, communication, agriculture, and so on.
- The Net Value Added at Factor Cost (NVAFC), which is the value-added at each step, is used to determine National Income. We must deduct the following when calculating the same for each industry:
  - Net Indirect Taxes
  - Capital Consumption
  - Raw Material Consumption
- Now NVAFC becomes the value after the deduction of the above things.
- When the NVAFC of industries is summed, the net domestic product at factor cost (NDPFC) is calculated.
- Finally, foreign states' net income should be included.
- Thus, in India,
  - National income = NDPFC + Net factor income from overseas.

10.4 Conclusion

The quantitative data gathered through national income accounting may be used to assess the impact of various economic initiatives. National income accounting, which is considered an aggregate of a country's economic activity, provides economists and statisticians with specific information that can be used to track an economy's health and estimate future growth and development. The data may be used to guide inflation policy, which is especially valuable in developing countries' changing economies, as well as information on output levels as they relate to moving labour forces.

11. Circular Flow of Income

The continual flow of products and services production, revenue, and spending in an economy is referred to as the **circular flow of income.** It depicts the circular transfer of income between the manufacturing unit and households. Here we will discuss in detail the circular flow of income, which will be useful for UPSC Civil Service Exam preparation.

11.1 What is Circular Flow of Income?

- The circular flow model depicts how **money circulates throughout society**. Money moves from producers to employees as wages, then back to producers as product payment. In a nutshell, an economy is a never-ending circle of money.
- Although this is the most basic version of the concept, actual money flows are more complex.
- Economists have included extra variables to properly reflect today's complicated economy. These elements make up a country's gross domestic product (GDP) or national income.
- The concept is also known as the circular flow of income model because of this.

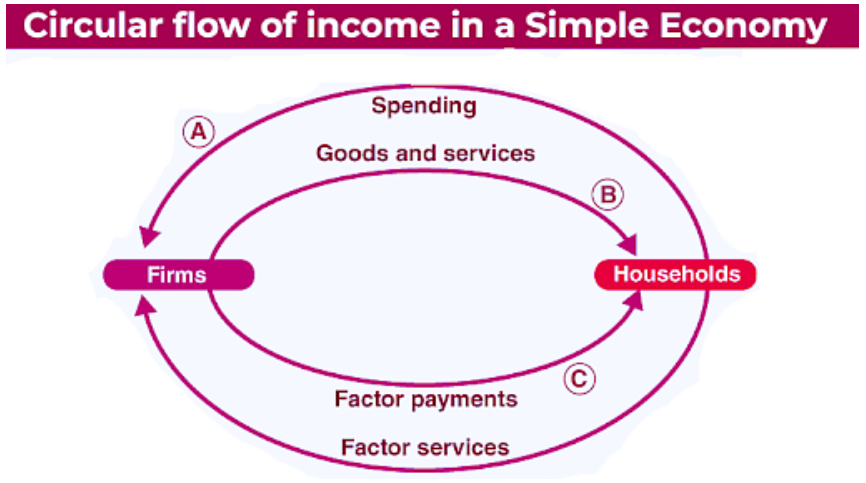
11.2 Concept

- The circular flow in an economy refers to the continuous movement of goods and services production, earning, and expenditure.
- It represents the cyclical revenue transfer between the production unit and the households.
- **Land, labor, capital, and entrepreneurship** are the four factors of production:
    - **Rent** is a payment given in exchange for the contribution produced by fixed natural resources (often known as land).
    - **Wage** is the monetary compensation for a human worker's contribution.
    - **Interest** is the payment provided in exchange for the capital contribution.
    - **Profit** is the monetary reward for entrepreneurship's contribution.

11.3 Case of Two-Sector Economy

It is described as the exchange of payments and receipts for products, services, and factor services between households and businesses.

- The diagram's lower portion depicts the flow of factor services from homes to businesses, as well as the equivalent flow of factor payments from businesses to consumers (C).
- The upper portion depicts the movement of goods and services from businesses to consumers (B), as well as the flow of consumer spending (A) from consumers to businesses.



11.4 Conclusion

The economic model depicting the circular movement of money between firms/producers and households is known as the circular flow of income. Because it only covers two sectors, households and businesses, this model is often known as a **two-sector economy.** Many other actors, including the government, national revenue, and overseas markets, are taken into consideration in the real world. The intricacy rises dramatically, yet the final outcome is still a cyclical flow of wealth.

Chapter 4: Aggregates of National Income -1

1. GDP

Gross Domestic Product (GDP) is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. It is calculated on a regular basis to account for changes in the production structure, relative pricing, and better documentation of economic activity. The GDP of India is a topic that is always in the news, hence it is significant for the UPSC Mains. For the IAS Exam, it is critical to learn facts about 'GDP in India,' and this article will offer you all relevant facts.

1.1 What is GDP?

- GDP is simply the **sum of the final prices of goods and services** produced in an economy over a specific time period.
- GDP stands for **Gross Domestic Product**, which is a measure of the worth of a country's economic activities.
- All private and public consumption, government outlays, investments, additions to private inventories, paid-in building expenses, and the foreign balance of trade are all factored into a country's GDP calculation.
- The **external balance of trade** is the most essential of all the components that make up a country's GDP.
- When the entire value of products and services sold by local producers to foreign nations surpasses the total value of foreign goods and services purchased by domestic consumers, a country's GDP rises. A country is considered to have a **trade surplus** when this happens.
- A **trade deficit** develops when the amount that domestic consumers spend on foreign items exceeds the entire amount that domestic manufacturers can sell to international customers. The GDP of a country tends to fall under this circumstance.

1.2 History of GDP

- **Simon Kuznets**, an economist at the National Bureau of Economic Research, initially proposed the concept of GDP in a report to the United States Congress in response to the Great Depression in 1937.

- **Gross National Product (GNP)** was the most widely used system of measurement at the time. GDP was generally embraced as the primary way of gauging national economies following the Bretton Woods conference in 1944.
- However, beginning in the 1950s, several economists and policymakers began to cast doubt on GDP.
- Some have seen a propensity to regard GDP as an absolute indication of a country's failure or success, despite the fact that it fails to account for health, happiness, equality, and other public welfare constituent aspects.
- To put it another way, these opponents made a contrast between economic and social advancement.
- Most experts, such as **Arthur Okun**, maintained that GDP is an absolute metric of economic performance, saying that for every increase in GDP, there would be a proportional decline in unemployment.

1.3 Types of Gross Domestic Product

1.3.1 *Real GDP*

The value of all goods and services generated by an economy in a given year (expressed in base-year prices) is reflected in the real gross domestic product (real GDP), which is also known as **constant-price GDP**, **inflation-corrected GDP, etc.**

1.3.2 *Nominal GDP*

- Nominal GDP is a measurement of economic output in a country that takes **current prices into account.**
- In other words, it does not account for inflation or the rate at which prices rise, both of which might overstate the growth rate.
- All products and services that are counted in nominal GDP are valued at the prices at which they are actually sold in that year.

1.3.3 *GDP Per Capita*

- The GDP per capita is a measure of the **GDP per person in a country's population**.
- It means that the quantity of output or revenue per person in a given economy may be used to estimate average productivity or living standards.
- Nominal, real (inflation-adjusted), and PPP (purchasing power parity) GDP per capita figures are available.

1.3.4 *GDP Purchasing Power Parity (PPP)*

While purchasing power parity (PPP) is not a direct measure of GDP, economists use it to see how one country's GDP compares to other countries' GDP in "international dollars" using a method that adjusts for differences in local prices and costs of living to make cross-country comparisons of real output, real income, and living standards.

1.3.5 *Estimating GDP*

- India's GDP is computed using two separate methodologies, yielding results that are near in range but not identical.
- The first is based on **economic activity (at factor cost)**, whereas the second is based on **spending (at market prices)**.
- Nominal GDP (calculated using current market prices) and real GDP are calculated further (inflation-adjusted).
- The GDP at factor cost is the most widely observed and reported figure among the four given figures.

1.4 Economic Activity at Factor Cost

The factor cost figure is generated by collecting information for each sector's net change in value over a given time period. This cost takes into account the following eight industry sectors:

1. Agriculture, forestry, and fishing.
2. Mining and quarrying.
3. Manufacturing.
4. Electricity, gas, water supply, and other utility services.
5. Construction.
6. Trade, hotels, transport, communication, and broadcasting.
7. Financial, real estate, and professional services.
8. Public administration, defense, and other services.

The following figure shows an example of this method of calculation.

Industry	***Gross Domestic Product (Rs. in crores)***		***Percentage change over previous year***
	Previous year	***Present year***	
	Q2	***Q2***	***Q2***
1. Agriculture, forestry and fishing	131550	135789	3.2
2. Mining and quarrying	25509	24774	-2.9
3. Manufacturing	187763	192849	2.7

4. Electricity, gas and water supply	22894	25137	9.8
5. Construction	91556	95489	4.3
6. Trade, hotels, transport and communication	311166	342080	9.9
7. Financial, real estate and business services	208644	230627	10.5
8. Community, social and personal services	169390	180511	6.6

1.5 Expenditure at Market Prices

- The expenditure (at market prices) technique entails adding up domestic spending on final products and services across multiple streams during a given time period.
- It takes into account household consumption spending, net investments (i.e. capital formation), government costs, and net trade (exports minus imports).

Item	***Rs. in crores*** **Expenditure of GDP**		**Rate of GDP at Market Prices (%)**	
	Previous year	**Present Year**	**Previous**	**Present**
	Q2	**Q2**	**Q2**	**Q2**
1. Private Final Consumption Expenditure (PFCE)	741,624	785,463	59.9	59.5
2. Government Final Consumption Expenditure (GFCE)	135,400	140,883	10.9	10.7
3. Gross Fixed Capital Formation (GFCF)	405,567	402,994	32.8	30.5
4. Change in Stocks	44,808	45,499	3.6	3.4
5. Valuables	29,984	37,681	2.4	2.9
6. Exports	262,098	333,947	21.2	25.3
7. *Less* Imports	356,753	395,512	28.8	29.9
8. Discrepancies	-25,117	-29,918	-2.0	-2.3
GDP at market prices	**1,237,610**	**1,321,038**	**100**	**100**

- Although the GDP figures from the two approaches do not quite match, they are near.
- The spending method provides useful information on which segments of the Indian economy contribute the most.
- For example, domestic household spending, which accounts for 59.05 percent of the economy, is one of the reasons why India is relatively unaffected by global economic slowdowns.

- Any economy that is heavily dependent on exports will be more vulnerable to global recessions.

1.6 Formula for Calculating GDP

GDP = C + I + G + IX

Where C = Consumption
I = Investment
G = Government Expenditure
IX = Export - Import

1.7 Importance of GDP

- GDP is often recognized as the most essential of the metrics used by economists throughout the globe to determine an economy's growth.
- It considers the country's overall output over the course of a year. It is a crucial criterion for assessing an economy's performance and a vital determinant in influencing the economy's development.

1.8 Limitations of GDP

- Non-market transactions are not included in GDP.
- It is unable to determine if a country's growth is sustainable.
- It ignores the influence on human health and the environment that may develop as a result of the output's creation or use as externalities.

1.9 GDP Calculation in India Since 2015

- The government switched to a **new base year of 2011-12** for national accounts in January 2015, replacing the previous base year of 2004-05.
- To better quantify economic activity, the Central Statistics Office (CSO) **discontinued GDP at factor cost** and embraced the worldwide practice of **GDP at market price and the Gross Value Addition (GVA) measure.**
  - **GDP at market price = GDP at factor cost + Indirect Taxes – Subsidies**
- With the switch to the new base year, the economy's growth rate was predicted to be **6.9% in 2013-14, up from 4.7 percent in 2004-05.** Similarly, the 2012-13 growth rate was increased to 5.1 percent from 4.5 percent.
- The most recent series' base year was changed from 2004-05 to 2011-12, and for the organised private sector, a new data series, MCA-21, was used.

- It contained information on all companies registered with the Ministry of Corporate Affairs, and each was given a unique **21-digit code, MCA-21**, to identify them.
- The new database is also much more comprehensive, covering financial institutions as well as regulatory bodies like **SEBI, PFRDA, and IRDA.**
- A number of local organisations and institutions are featured in this series.
- In the previous system, IIP was used to track manufacturing and trading activity. Changes in volume were accounted for, but not in value. In the newer methodology, we use the concept of GVA – Gross Value Added – to measure the value added to the economy.
- GDP was previously estimated using **IIP data, which was then updated using ASI data (Annual Survey of Industries)**. Only those businesses that were registered under the **Factories Act were included in ASI**.
- The newer system uses data from **MCA 21 (MCA 21 is a Ministry of Corporate Affairs e-governance** initiative that was launched in 2006 and allows firms/companies to electronically file their financial results).
- Previously, farm produce was used to calculate agricultural income as a proxy. The scope of calculating value addition in agriculture has been expanded thanks to the new methodology.
- When **evaluating financial activity under the previous system**, only a few mutual funds and NBFCs were taken into account.
- Stockbrokers, asset management funds, pension funds, stock exchanges, and other entities are now included in the new methodology's coverage.
- The old system used data from the **NSSO's 1999 establishment survey** for trading income, while the new series uses data from the 2011-12 survey.

1.10 Conclusion

GDP allows policymakers and central banks to determine whether the economy is declining or increasing, whether it needs stimulus or restraint, and whether a threat such as a recession or inflation is imminent. GDP, like any other metric, has flaws. In the last several decades, governments have experimented with a variety of nuanced changes in an attempt to improve GDP precision and specificity. Since its inception, the methods for calculating GDP have developed to keep up with changing measures of economic activity and the production and consumption of new, developing kinds of intangible assets.

2. Factor Cost

Factor costs include all the costs of the factors of production to produce a given product in an economy. In India, the most highlighted measure of national income has been the GDP at factor cost. **The Central Statistics Office (CSO)(now National Statistical Office-NSO)** of the Government of India has been reporting the GDP at factor cost and at market prices. In its revision, in January 2015 the CSO replaced GDP at factor cost with the GVA at basic prices, and the GDP at market prices, which is now called only GDP, is now the most highlighted measure. Here we will discuss the Factor Cost in detail, which will be useful for UPSC Civil Service Exam preparation.

2.1 What is Factor Cost?

- The manufacturing process needs a lot of inputs. Land, labor, capital, and entrepreneurship are examples of these inputs, which are referred to as **factors of production.**
- The use of these elements of production comes at a cost to producers of goods and services.
- The **cost of factors of production borne by a company** when manufacturing goods and services is referred to as factor cost.
    - Renting machines, acquiring machinery and land, paying employees and wages, getting money are all examples of such production costs.
- **Taxes paid to the government are not included** in the factor cost since they are not directly engaged in the production process and so is not a component of the direct production cost.

2.2 Significance of Factor Cost

Factor cost has the following uses in economics:

- Factor cost or national income by type of income is a measure of national income or output based on the cost of factors of production, instead of market prices. It allows the effect of any subsidy or indirect tax to be removed from the final measure.
- It can also refer to the unit cost of a particular factor of production, such as the wage rate or the rental rate of capital.
- **Factor Cost or Factor Income** are the incomes received by the owners of the production for rendering their factor services to the producers.
- Corresponding to the real flow of factor services from the households to the producers, there is a money flow from the producers to the

households in the form of rent, interest, profit, and wages which results in the production of goods and services in the economy.

2.3 Conclusion

Factor Cost is a benchmark for the different types of calculation in the economy. It helps to understand the cost of production, what changes are required, etc in an economy. Thus, it forms the basis of all growth-related calculations in any economy.

3. Basic Prices

The **basic price** is the amount a producer **receives from a purchaser for a unit** of a thing or service provided as an output, less any tax owed and any subsidy owed to the producer as a result of its production or sale. Here we will discuss in detail the Basic Prices, which will be helpful for UPSC Civil Service preparation.

3.1 What is the Basic Price?

- The basic price is the amount the producer receives from the purchaser for a unit of a good or service produced as output, minus any tax due (such as sales tax or VAT paid by the buyer) and any subsidy due on that unit as a result of its production or sale.
- It does not include any transportation charges invoiced separately by the producer.
- In other words, the basic price is the amount collected by the seller rather than the amount paid by the customer.

Basic price = Factor cost + Production taxes – Production subsidy

- The term Basic price is the alternate term to describe a **Producer's price.**
- It is different from market prices or buyer's prices.
- **Production taxes or production subsidies** are paid or received with relation to production and are independent of the volume of actual production.
- Some examples of production taxes are land revenues, stamps and registration fees, and tax on the profession.
- GVA at basic prices will include production taxes and exclude production subsidies available on the commodity.

3.2 Basic Price - Significance

- It is one of the factors which determine the demand for a product.
- It excludes product taxes and subsidies.

3.3 Conclusion

Basic Price is a benchmark for the different types of calculation in the economy. It helps to understand the cost of production and other inherited costs, determines the demand in the market, etc in an economy. Thus, it forms the basis of all growth-related calculations in any firm.

4. Market Price

The **market price** is the **current price** at which an asset or service can be bought or sold. It is an important term in the concept of Production and Supply in Economics. Here we will discuss the various dimensions of Market Price, which will be helpful for UPSC Civil Service preparation.

4.1 What is Market Price?

- After goods and services are manufactured, they are sold at market prices.
- The market price is the price at which customers will pay for a product when they **buy it from a retailer**.
- To arrive at the market price, government taxes will be added to the factor cost, while **subsidies will be subtracted from the factor cost**.
- **Subsidies** are decreased because subsidies recompense the factor cost or lower the market price and the factor cost.
- Taxes are increased because they are costs that raise the price, and subsidies are reduced because they compensate for the factor cost or reduce the market price and the factor cost.

  Market price = Basic price + Product taxes – Product subsidy

  Or

  Market Price = Factor cost + Net indirect taxes

  (Net indirect taxes = Indirect taxes – Subsidy)
- Per unit of product, **product taxes or subsidies** are paid or received.
- **Excise tax, sales tax, service tax, and import and export charges** are all examples of product taxes.
- Food, petroleum, and fertilizer subsidies are examples of product subsidies.

4.2 Understanding the Market Price

- A shift in the market price for an item or service can be caused by shocks to the supply or demand for that good or service.
  - A **supply shock** occurs when an unforeseen occurrence occurs that causes the supply of an item or service to abruptly shift.
    - Interest rate reduction, tax cuts, government stimulus, terrorist attacks, natural catastrophes, and stock market collapses are all instances of a supply shock.

- A **demand shock** occurs when the demand for an item or service suddenly surges or declines.
    - A sharp increase in the price of oil or other commodities, political unrest, natural calamities, and technological advancements are all instances of a demand shock.

4.3 Why Market Price is Important?

- One of the key reasons market price is significant is that it gives a **precise way for establishing what an item is worth** that eliminates ambiguity or confusion.
- Customers and sellers in the marketplace frequently hold opposing views about a product's worth.
- The fundamental purpose of assessing market price is to arrive at an **accurate appraisal of the asset's worth or value**.
- It is, simply said, the price at which the item would typically be sold. Buyers can choose to pay, while sellers can take more or less than market value.

4.4 Conclusion

The amount of money for which an asset may be sold in a market is referred to as market price. The market price of a particular commodity is the point at which demand and supply for that good converge. It's a crucial part in calculating consumer surpluses, economic surpluses, and other types of surpluses. Due to variations or shocks in demand and supply variables, the market price of an item or service is vulnerable to revaluation.

5. Base Year

When calculating a business operation or economic index, a **base year** is used for comparison. Thus, the **base year acts as a benchmark** in the growth of a firm or an economy. Here we will discuss in detail about the base year which will be helpful for UPSC Civil Service preparation.

5.1 What is Base Year?

- The base year of National Accounts is set to allow for **inter-year comparisons**.
- It enables the computation of inflation-adjusted growth estimates and offers a sense of changes in buying power.
- The base year for the most recent National Accounts series was altered from **2004-05 to 2011-12.**
- The base year serves as a baseline against which national account metrics such as GDP, gross domestic savings, and gross capital creation are measured.

5.2 How Base Year is fixed and what are the After Effects?

- The **Central Statistical Organisation (CSO) (now NSO)** of India issued the first estimates of national income in 1956, using 1948-49 as the base year.
- The technique was altered as the availability of data improved over time.
- Previously, CSO relied on population estimates from the National Census to determine the economy's workforce.
- As a result, the base year was always the same as the census year, such as 1970-71, 1980-81, and so on.
- As a result, the CSO determined that the **National Sample Survey (NSS)** data on workforce size were more accurate and that the base year would be changed every five years when the NSS performed such a survey.
- From 1999, when the base year was changed from 1980-81 to 1993-94, this approach was implemented.
- The government switched to a new base year of 2011-12 for national accounts in January 2015, replacing the previous base year of 2004-05.
- With the switch to the new base year, the economy's growth rate was predicted to be 6.9% in 2013-14, up from 4.7 percent in 2004-05. Similarly, the 2012-13 growth rates was increased to 5.1 percent from 4.5 percent.

5.3 Importance

- The base year prices are also known as **constant prices** since they reduce all of the data to a similar baseline, the base year price.
- The base year is a representative year that is **free of unusual events** such as droughts, floods, earthquakes, and so on.
- It is a year that's very close to the one for which the national accounts statistics are being compiled.
- The base year must be updated regularly to reflect structural changes in an economy, such as a rising percentage of services in GDP.
- The data will be more accurate if the base year can be updated more regularly.

5.4 Conclusion

Base year holds a key position in the National Accounting Standards. It offers a comparative approach between the current and past state of the economy. Proper revision of the base year is important for a healthy economy to understand the changes in the system.

6. Gross National Product (GNP)

Gross National Product (GNP) is an indicator of a **country's national income.** The total value of all commodities and services generated by a country's citizens and enterprises, regardless of where they are produced, is referred to as the **gross national product (GNP).** This article will explain to you the concepts related to the **Gross National Product (GNP)** which will be helpful in Indian Economy preparation for the IAS exam.

6.1 Gross National Product (GNP)

- The total value of all goods and services generated by citizens and enterprises in a country, regardless of where they are produced, is referred to as the **gross national product (GNP).**
- The **Gross National Product (GNP**) accounts for investments made by enterprises and citizens of the country, both inside and outside the country. It also takes into account the value of products generated by **domestically based industries.**
- GNP does not include revenue made by **foreign nationals** in the country or any products manufactured by a foreign business in the country's manufacturing units.
- Only the final commodities and services are taken into account when **calculating GNP**. Double counting is prevented by avoiding intermediate products.
- The following elements are taken into account when calculating a country's GNP:
  - Consumption expenditure
  - Investment
  - Government expenditure
  - Net exports (Total exports minus total imports)
  - Net income (Income earned by residents in foreign countries minus income earned by foreigners in the country)
- The following is the mathematical formula for calculating GNP:
  - **GNP = Consumption expenditure + Investment + Government expenditure + Net exports + Net income**
- Manufacturing of items such as equipment, machinery, agricultural products, and cars, as well as some services such as consulting, education, and health care, are all included in GNP.
- The cost of providing the services is not individually calculated because it is included in the final product price.

- The **calculation of GNP** per capita is used for country-to-country comparisons, however, it becomes complicated when a citizen possesses dual citizenship. In this situation, their earnings are accounted for as GNP in each of the separate countries, resulting in double counting.

Example

- Consider a country where the gross national product is higher than the gross domestic product.
- This means that the country's citizens, firms, and corporations are bringing in net inflows through their international operations.
- As a result, a **higher GNP** could indicate that a country is expanding its foreign financial operations, trade, or production.

6.2 Importance

- Economists consider GNP to be an **essential economic indicator.** They use it to come up with answers to economic problems like **poverty and inflation.**
- When income is determined per person, regardless of location, GNP becomes a far more trustworthy indicator than GDP.
- The BoP is analysed using the information acquired from GNP (Balance of Payments). Economists utilize GNI, or gross national income, in some countries or unions, such as the **European Union.**
- The entire worth of products and services generated by the inhabitants of a country in a given year is known as the Gross National Product (GNP).
- It isn't limited to a certain region. When we look at India's GNP, we can see that it is lower than GDP. The value of foreign currency changes.

6.3 Drawbacks

- The value of a foreign currency change. As a result, it has an impact on the calculation.
- It is useless in judging whether an economy is expanding or contracting.

6.4 Conclusion

The **gross national product (GNP)** is an estimate of the total worth of all final products and services produced by the means of production held by a country's people in a particular period. Personal consumption expenditures, private domestic investment, government expenditure, net exports, and any income made by locals from overseas investments, minus income earned within the domestic economy by foreign residents, are all used to compute GNP. Net exports are the difference between what a country exports and any products and services it imports.

7. Net Domestic Product (NDP)

Net domestic product (NDP) is a yearly measure of a country's economic output. The net worth of all goods and services generated **inside a country's geographic borders** is referred to as the net domestic product. It is regarded as a significant measure of a country's economic growth. Which is determined by **deducting depreciation from gross domestic product (GDP)**. This article will explain to you the concepts related to the Net Domestic Product (NDP) which will be helpful in Indian Economy preparation for the IAS exam.

7.1 Net Domestic Product (NDP)

- The **net worth** of all **goods and services** generated inside a country's geographic borders is referred to as the net domestic product. It is regarded as a **significant measure** of a country's economic growth.
- The value of depreciation of national capital assets such as machinery, houses, and cars is subtracted from the **gross domestic product (GDP)** to arrive at the **net domestic product (NDP) .**
- Other considerations such as asset obsolescence and complete destruction are also taken into account by the NDP. Capital consumption allowance is another term for depreciation.
- If a country's capital stocks are not replaced as a result of **depreciation,** the country's GDP falls.
- It is considered favourable for an economy if the gap between **GDP and NDP** narrows or closes. It also denotes a state of **economic equilibrium.** A bigger disparity between **GDP and NDP,** on the other hand, indicates an increase in the value of obsolescence.
- Such a rise, along with a decline in the value of the capital stock, suggests economic stagnation.
- NDP can be calculated using the following formula.
  - **NDP = GDP – Depreciation**
- Depreciation is the term used to describe the **depreciation of capital assets such as equipment, vehicles, and houses.**
- **The NDP** is thought to be preferable to the **GDP** as a measure of a country's well-being because it accounts for depreciation of capital assets.
- This notion is about NDP, or net domestic product, which is a key metric for measuring a country's economic health.
- A **rising NDP indicates a growing economy**, whereas a falling NDP indicates stagnation.

7.2 Importance

- **Net domestic product** is sometimes regarded as a more accurate economic statistic than GDP since it includes the amount of money spent on upgrading outmoded equipment in order to maintain the same level of output.
- Although an increase in depreciation can raise GDP, it does not imply that the country's social and economic well-being has improved.
- As a result, by **examining net investment**, NDP may provide a better picture of a country's economic health.
- The economy expands when the **net investment is positive.** When net investment is negative, it is unable to offset depreciation and maintain current output levels, indicating that the economy is in decline.
- When comparing a country's **GDP and NDP**, a growing disparity between the two shows increased obsolescence and value deterioration of the country's capital stock. It could indicate a period of economic stagnation.
- A narrowing gap between **GDP and NDP** indicates that the country's capital stock is in better shape. The country appears to be reinvesting in its economy and upgrading its capital.

7.3 Conclusion

NDP, along with GDP, GNI, disposable income, and personal income, is one of the primary indicators of economic growth released by the Bureau of Economic Analysis on a quarterly basis (BEA). Though GDP is usually used to gauge a country's economic health, NDP considers the rate at which capital assets degrade and need to be replaced. This is critical since failure to respond would result in a reduction in the country's GDP.

8. Gross Value Added (GVA)

Gross value added (GVA) measures the entire value of goods and services produced in a given economy. The amount of value added to a product is considered. GVA is significant since it is used to **calculate GDP**, a vital indication of a country's overall economic health. It can also be used to determine the amount of value added (or lost) by a certain region, state, or province. This article will explain to you the concepts related to the **Gross Value Added (GVA)** which will be helpful in Indian Economy preparation for the IAS exam.

8.1 Gross Value Added (GVA)

- The contribution of a **corporate subsidiary**, company, or municipality to an economy, producer, sector, or region is measured by **gross value added (GVA),** an economic productivity statistic.
- The difference between gross and net output is the GVA, which is the country's **output minus intermediate consumption.**
- GVA is significant because it is used to **adjust GDP**, which is a major indicator of a country's overall economic health.
- It can also be used to calculate how much a **product or service** has helped a firm meet its fixed costs.
- It is the **principal entry** on the revenue side of the nation's accounting balance sheet, and it reflects the supply side from an economic standpoint.
- GVA is the sum of a country's GDP and net of subsidies and taxes in the economy at the macro level, according to national accounting standards.

Gross Value Added = GDP + subsidies on products - taxes on products

- Previously, India measured GVA at **'factor cost'** until a new approach was implemented, with GVA at 'base prices' becoming the key indicator of economic output.
- Production taxes will be included in GVA at basic prices, while production subsidies will be excluded.
- GVA at factor cost did not include any **taxes or subsidies.**
- In addition, the base year has been changed from 2004-05 to 2011-12.
- The **National statistical office (NSO)** publishes estimates of GVA output on a quarterly and annual basis. It contains data on eight main types of commodities produced and services offered in the economy, as well as sectoral classification data.

- Agriculture, Forestry, and Fishing.
- Mining and Quarrying.
- Manufacturing.
- Electricity, Gas, Water Supply, and other Utility Services.
- Construction.
- Trade, Hotels, Transport, Communication, and Services related to Broadcasting.
- Financial, Real Estate, and Professional Services.
- Public Administration, Defence and other Services.

8.2 Importance

- **GVA** depicts the state of **economic activity** from the perspective of producers or supply, GDP depicts the state of economic activity from the perspective of consumers or demand.
- **GVA** is seen to be a more **accurate indicator of the economy**. Because a sudden increase in output can be attributed to higher tax collections, which could be due to better compliance or coverage, rather than the **genuine output situation**, **GDP fails** to measure the **true economic reality.**
- The GVA measure provides a sector-by-sector analysis, which helps policymakers determine which sectors require incentives or stimulation and create sector-specific policies accordingly.
- However, when it comes to cross-country comparisons and comparing the earnings of different countries, **GDP is a critical metric.**
- GVA is an **important and necessary** metric in measuring a country's economic success from the standpoint of global data standards and homogeneity.
- Any government that wants to attract foreign money and investment must follow international best practices in national income accounting.

8.3 Drawbacks

- The **sourcing of data and the accuracy** of the numerous data sources are critical to GVA accuracy.
- GVA, like any other metric, is vulnerable to flaws caused by the use of **ineffective or incorrect procedures**.

8.4 Conclusion

GVA is significant since it is factored into GDP, a vital indication of a country's overall economic health. It can also be used to determine how much value is added (or taken away) by a specific region, state, or province.

9. Basic National Income Aggregates

The **Basic National Income Aggregates** refers to a set of rules and methodologies for calculating a country's production. National income is calculated using a variety of macroeconomic identities such as **GDP, GVA, and NNP. GDP** is divided into four primary expenditure categories by the national income accounts: consumption, investment, government purchases, and net exports. This article will explain to you the concepts related to the **Basic National Income Aggregates** which will be helpful in Indian Economy preparation for the IAS exam.

9.1 Basic National Income Aggregates

- Within an accounting year, **national income** is defined as the net money worth of all final goods and services produced by residents **residing within and outside the country's borders**.
- GDP is divided into four primary expenditure categories by the national income accounts: consumption, investment, government purchases, and net exports.
- The aggregates related to national income are
- Gross Domestic Product (GDP) (market price and factor cost)
- Gross National Product (GNP)
- Gross National Product at the Market price (GNPMP)
- Net National Product (NNP)
- National Income (Net National Income at Factor Cost)
- Net Domestic Product at Market Price (NDPMP)
- Net Domestic Product at FC or (NDPFC)
- Gross National Product at FC (GNPFC)

9.1.1 *Gross Domestic Product (GDP)*

- The market worth of all final **goods and services** produced inside a country for a certain time period is referred to as GDP.
- The term **"domestic"** in **Gross Domestic Product** refers to the fact that the GDP only includes goods and services generated **within a country**.
- In the calculation of GDP, only **'final' products and services** are considered.
- The term **"final products and services"** refers to commodities and services that are intended for final consumption (for final user). It differs

from intermediate goods and services, which serve as a component in the production of final goods and services.

- The number of goods and services produced over a given time period (typically a year) is counted. GDP is calculated regularly and annually in India.
- **GDPMP** stands for **Gross Domestic Product at Market Prices**, which is the gross market value of all final products and services produced within a country's domestic territory within a given accounting year.
- **GDPMP** = Net domestic product at FC (NDPFC) + Depreciation + Net Indirect tax.
- **Gross domestic product at factor cost,** or GDPFC, is the entire money worth of products and services generated within a nation's domestic territory within a single accounting year, excluding net indirect taxes.
- **GDPFC** = GDPMP – Net Indirect tax.

9.1.2 *Gross National Product (GNP)*

- **GNP i**s another indicator of a country's national income.
- In the case of GDP, the market value of all final goods and services produced within the country is calculated.
- However, it is possible that Indian citizens work and earn money in other nations. On the other hand, some productivity within a country may be attributable to temporary and seasonal foreign labour.
- **GNP** = GDP + 'Net' factor income from abroad
- **Net Factor income from abroad** = income earned by the domestic factors of production employed in the rest of the world – Factor income earned by the factors of production of the rest of the world employed in the domestic economy.

9.1.3 *Gross National Product at Market price (GNPMP)*

- It is the total of factor incomes earned by ordinary citizens of a country over the course of a fiscal year, including depreciation and net indirect taxes.
- GNPMP = NNPFC + Dep + Net indirect tax

9.1.4 *Net National Product (NNP)*

- **Production factors** are subjected to wear and tear. Depreciation is the term for this wear and tear. This wear and tear consumes a portion of capital that is not utilised in the creation of products and services.
- When we subtract depreciation from GNP, we get NNP.

- **Net National Product (Market Price)** = Gross National Product – Depreciation
- **NNP (Factor Cost)** = NNP (Market Price) – Taxes + Subsidies.

9.1.5 *National Income (Net National Income at Factor Cost)*

- National Income is the Net National Product at Factor Cost.
- NNP (Factor Cost) = **National Income** = NNP (Market Price) – Taxes + Subsidies.

9.1.6 *Net Domestic Product at Market Price (NDPMP)*

- It is the monetary worth of all final goods and services produced within a country's domestic territory within a given accounting year, excluding depreciation.
- NDPMP = GDPMP – Depreciation

9.1.7 *Net Domestic Product at FC or (NDPFC)*

- It's the total worth of all final goods and services, excluding depreciation and net indirect tax.
- As a result, it equals the sum of all factor incomes (employee compensation, rent, interest, profit, and mixed income of self-employed) created in the country's domestic territory.
- NDPFC = GDP at MP – Depreciation – Indirect tax + Subsidy

9.1.8 *Gross National Product at FC (GNPFC)*

- During an accounting year, it is the sum total of factor incomes earned by ordinary people of a country, plus depreciation.
- GNPFC = NNPFC + Depreciation.

9.2 Other Aggregates

9.2.1 *Personal Income*

- Households receive a portion of national income known as personal income.
- **Personal income (PI)** ≡ NI – Undistributed profits – Net interest payments made by households – Corporate tax + Transfer payments to the households from the government and firms.
- **Undistributed profits** - these are profits that are not distributed to families
- **Corporate tax -** this is another tax that does not accrue to individuals.

9.2.2 *Personal Disposable Income*

- **Personal Disposable Income (PDI)** is the amount of money available to households to spend as they see fit.
- Individuals do not have access to all of their Personal Income. They must pay both taxes (e.g., income tax) and non-tax payments (e.g., fines).
- **Personal Disposable Income (PDI**) = PI – Personal tax payments – Non-tax payments (such as fines etc).
- As a result, Personal Disposable Income is the portion of total income that belongs to households. They might decide to eat a portion of it and keep the remainder.

9.2.3 *National Disposable Income*

- The term "National Disposable Income" refers to the maximum value of goods and services available to the domestic economy.
- **National Disposable Income** = Net National Product at market prices + Other current transfers from the rest of the world.
- Gifts, help, and other items are among the current transfers from the rest of the world.

9.2.4 *Private Income*

- Any type of money obtained by a private individual or family, generally generated from occupational activities, or revenue received by an individual that is not in the form of a salary, wage, or commission is referred to as "private income."
- **Private Income** = Factor income from net domestic product accruing to the private sector + National debt interest + Net factor income from abroad + Current transfers from government + Other net transfers from the rest of the world.

9.3 Conclusion

The total worth of goods and services generated by a country during its fiscal year is referred to as its national income. It is thus the result of all economic activity that takes place in a country over the course of a year. It is valued in monetary terms. In a nutshell, a country's national income is the entire amount of money it earns over the course of a year through various economic activities. It is also useful in determining the country's progress.

10. Gross Domestic Product at Market Prices (GDP-MP)

The **Gross Domestic Product at Market Prices (GDP-MP)** measures the wealth created by all private and governmental agents in a given country over a specified time period. It is the most important national account aggregate; it represents the maximum outcome of resident producing units' productive activity. This article will explain to you the concepts related to the **Gross Domestic Product at Market Prices (GDP-MP)** which will be helpful in Indian Economy preparation for the IAS exam.

10.1 Gross Domestic Product at Market Prices (GDP-MP)

- The **Gross Domestic Product (GDP)** measures the economic output generated by consumers. It includes private consumption, gross investment in the economy, government investment, government spending, and net international trade (the difference between exports and imports).
- To better assess economic activity, the Central Statistics Office (CSO) (now renamed as National Statistical Office) abandoned GDP at factor cost in 2015 and embraced the international practice of GDP at market price and the Gross Value Addition (GVA) metric.
- GDP at market price = GDP at factor cost + Indirect Taxes – Subsidies
- At market prices, there are three ways to calculate GDP:
- **The production approach**, defined as the sum of all activities that produce goods and services, plus taxes and minus product subsidies.
- **The expenditure approach**, which is defined as the sum of all final expenditures made in either consuming or adding to wealth, plus exports and minus imports of goods and services.
- **The income approach**, which considers all earnings earned during the production of products and services (paying salaries, gross operating margin, and mixed-income), plus production and import taxes, and minus subsidies.
- The Ministry of Finance uses GDP numbers (at current prices) to set fiscal targets under the Fiscal Responsibility and Budget Management Act 2003 and Rules there under.
- **The relation between GVA and GDP:** GVA at basic prices + (product taxes) – (product subsidies) gives GDP at market price.

10.2 Significance

- Domestic GDP was previously computed using the factor cost method, which took into account the prices of goods received by producers. Consumers' market pricing is factored into the new calculation.
- More thorough data on company activity has been incorporated into the new GDP, and it now encompasses more factories. Not only are production costs now taken into account, but also selling and marketing expenditures.
- Previously, the government's receipts were not included in India's headline GDP. After removing subsidies, what it gets from indirect taxes (such as sales tax and excise duty) is now included in headline GDP. GDP at a constant market price, for example.
- The disadvantage of this strategy is that the GDP figure can be altered by changing the distribution of subsidies or raising taxes.

10.3 Conclusion

Market price clearly incorporates both product and production taxes while excluding both product and production subsidies. GDP at Market Prices is calculated by subtracting the value of intermediate consumption from the total value of output produced by all producers within a country's domestic territory. In other words, it is calculated as the entire gross value added multiplied by the market price.

Chapter 5: Aggregates of National Income -2

1. GDP at Factor Cost (GDP-FC)

Gross domestic product (GDP) at factor cost is GDP at market prices minus net indirect taxes. The money value of output produced within a country's domestic limits in a year, as received by the factors of production, is measured by GDP at factor cost. In the base year 2004-05 the headline GDP is GDP at factor cost. This article will explain to you the concepts related to the **GDP at Factor Cost (GDP-FC)** which will be helpful in Indian Economy preparation for the IAS exam.

1.1 GDP at Factor Cost (GDPFC)

- **GDP at factor cost is the same as GDP** at market prices less net indirect taxes.
- GDP at factor cost measures the money worth of output produced within a country's domestic constraints in a year as received by the factors of production.
- **Factor cost** might have been used to calculate GDP at market prices, but Indian GDP was presented as GDP at factor cost in the base year 2004-05.
- To obtain **GDP at market price,** indirect taxes were added and subsidies were deducted from factor cost.
- Currently in the base year 2011- 12, headline GDP is now GDP at market prices.
- **Gross Value Added (GVA)** at basic prices is used to calculate GDP at market prices.

1.2 Significance

- **GDP at factor cost** represents what a **producer receives** from industrial activity.
- This can be broken down into several components, including wages, profits, rents, and capital, which are all **well-known production variables.**
- Aside from these expenses, producers may have to pay property tax, stamp taxes, and registration fees, among other things.

- Similarly, producers may receive production-related subsidies, such as input subsidies for farmers and small businesses (not food or petrol subsidies that you get on the final product).
- It's worth noting that just the taxes and subsidies on intermediate inputs have been modified.
- **Gross value added (GVA)** at basic prices will now be used instead of **GDP at factor cost.**
- **Production taxes,** such as **property tax**, are added to GDP at factor cost, and subsidies are removed from GDP to arrive at the new gross value added (GVA) at basic prices.

1.3 Conclusion

Using the old definition and base year of 2004-05, India's GDP growth in 2012-13 and 2013-14 was 4.5 percent and 4.7 percent, respectively. The new Indian GDP statistic, on the other hand, puts GDP growth at 5.1 percent in 2012-13 and 6.9 percent in 2013-14. The change to this way of calculating GDP has brought the method up to pace with those used by international organisations such as the IMF and the World Bank.

2. Net Domestic Product at Market Prices (NDPMP)

Net domestic product (NDP) at market prices is **gross domestic product (GDP)** minus fixed capital consumption (abbreviated as NDP). Unlike GDP, NDP accounts for the depreciation of fixed assets (such as computers, buildings, transportation equipment, machinery, and so on) employed in the manufacturing process. Depreciation is subtracted from the gross domestic product to arrive at NDP. This article will explain to you the concepts related to the **Net Domestic Product at Market Prices (NDPMP)** which will be helpful in Indian Economy preparation for the UPSC IAS exam.

2.1 Net Domestic Product at Market Prices (NDPMP)

- The annual measure of a country's economic production, corrected for depreciation, is known as the **net domestic product (NDP).**
- Depreciation is subtracted from the **gross domestic product (GDP)** to arrive at this figure.
- **NDP, along with GDP**, **GNI, disposable income, and personal income**, is one of the primary indicators of economic growth.
- An increase in NDP indicates improving economic health, whereas a decline indicates stagnation.
- NDP accounts for capital that has deteriorated over the course of the year as a result of the degradation of homes, vehicles, or machinery.
- The amount needed to replace those depreciated assets is frequently referred to as capital consumption allowance, and it is accounted for as depreciation.
    - **NDP = GDP − Depreciation.**

2.2 Significance

- The value of depreciation of national capital assets such as machinery, houses, and cars is subtracted from the **gross domestic product (GDP)** to arrive at the **net domestic product (NDP)**.
- Other considerations such as asset obsolescence and complete destruction are also taken into account by the NDP. Capital consumption allowance is another term for depreciation.
- If a country's capital stocks are not replaced as a result of depreciation, the country's **GDP falls.**
- It is considered favourable for an economy if the gap between **GDP**

and NDP narrows or closes. It also denotes a state of economic equilibrium. A bigger disparity between **GDP and NDP,** on the other hand, indicates an increase in the value of obsolescence.

- Such a rise, along with a decline in the value of the capital stock, suggests economic stagnation.
- A rising NDP indicates a thriving economy, whereas a falling NDP indicates stagnation.

2.3 Conclusion

NDP, along with GDP, GNI, disposable income, and personal income, is one of the primary indicators of economic growth. Though GDP is usually used to gauge a country's economic health, NDP considers the rate at which capital assets degrade and need to be replaced. This is critical since failure to respond would result in a reduction in the country's GDP.

3. NDP at Factor Cost (NDP-FC)

NDP at factor cost is the income earned by the factors in the form of wages, profits, rent, interest, etc., within the domestic territory of a country. "The sum total of net values added by all producers in the country's domestic territory throughout an accounting year is the **net domestic product at factor cost**." This article will explain to you the concepts related to the **Net Domestic Product at Factor Cost (NDP-FC)** which will be helpful in the Indian Economy preparation for the UPSC IAS exam.

3.1 Net Domestic Product at factor Cost – Definition

According to Hanson, "Net domestic income is the income generated in the form of wages, rent, interest and profit in the domestic territory of a country by all the producers (normal residents and non-residents) in an accounting year."

In the words of Peterson, "The net domestic product at factor cost is the sum total of net values added by all the producers in the domestic territory of the country during an accounting year."

3.2 NDP at Factor Cost – Constituents

1. **NDP at Factor Cost:** Except for net indirect taxes, NDP at Factor Cost comprises all parts of NDP at the market price of net value-added. The value-added at factor cost is equivalent to the NDP at factor cost.

NDP AT FACTOR COST = NDP AT MARKET PRICE - Indirect Cases + Subsidies

2. **Net Domestic Factor Income:** Wages, rent, interest, and profit received by the factors of production are the components of net domestic factor income. In India, net domestic factor income includes self-employed mixed-income.

3.3 What is the difference between NDP at market price and NDP at factor cost?

NDP at Market price	NDP at Factor cost
• The difference between net national product at market price and net factor income from abroad is referred to as net domestic product at market price. • Gross national product at market price minus depreciation equals Net national product 10 at market price. • Net national product at market price − Net factor income from overseas = Net domestic product at market price.	• The income earned by factors in the form of wages, earnings, rent, interest, and so on within a country's domestic territory is referred to as Net Domestic Product at Factor Cost (NDP at FC). It also includes 1. reserve funds or corporate savings of firms 2. corporation and other direct taxes 3. mixed income of self-employed 4. profits from the government, enterprises 5. property income of the government, and 6. savings of non-departmental enterprises, in addition to the four remunerations listed above.

3.4 Conclusion

NDP at factor cost is the gross domestic product. It refers to the entire amount of factor income created within a country's domestic territory during the course of an accounting year.

4. Gross National Product at Market Prices (GNPMP)

GNP at market price is the market value of all final goods and services produced in a country's domestic territory by ordinary citizens during an accounting year, including net factor income from abroad. **GNP** is the most fundamental concept in national income accounting. This article will explain to you the concepts related to the **GNPMP** which will be helpful in Indian Economy preparation for the IAS exam.

4.1 Gross National Product at Market Prices (GNPMP)

- The market value of all final goods and services produced in a country's domestic territory by normal citizens during an accounting year, including net factor income from overseas, is defined as **GNP at market price.**
- GNP is the most fundamental concept in national income accounting.
  - **GNP (MP) = GDP (MP) + Net factor income from abroad**
- **GNP is a subset of GDP**. While GDP confines its economic analysis to the country's physical borders, GNP broadens it to include the net abroad economic activity carried out by its citizens.
- **GNP is an economic concept** since it comprises the productive activities of both domestic and international people of a country.
- GNP is based on ordinary residents, while GDP is based on domestic territory.

4.2 Significance

- The **GNP** measures how much a country's inhabitants contribute to its economy. It takes citizenship into account, regardless of where the property is located.
- Foreign residents' income earned within the country is not included in the **GNP.**
- **GNP** also excludes foreign citizens' and enterprises' revenue earned in India, as well as products created in India by international corporations.
- **GNP (MP) and GDP (MP)** differs on the basis of **Net Factor Income from Abroad**.
- The difference between the factor income earned from abroad by normal residents of a nation and the factor income earned by non-residents of that country is known as "net factor income from abroad."

- **GNP (MP) includes all GDP (MP)** components as well as net factor income from other countries.

4.3 Conclusion

The **Gross National Product (GNP)** at market price accounts for investments made by enterprises and citizens of the country, both inside and outside the country. It also takes into account the value of products generated by domestically based industries. GNP does not include revenue made by foreign nationals in the country or any products manufactured by a foreign business in the country's manufacturing units.

5. Gross National Product at Factor Cost (GNP-FC)

Gross national product at factor cost (GNPFC) is the sum total of factor income earned by citizens of a country during an accounting year, **including depreciation**. GNP is the most fundamental concept in national income accounting. This article will explain to you the concepts related to the **Gross National Product at Factor Cost (GNPMP)** which will be helpful in Indian Economy preparation for the IAS exam.

5.1 Gross national product at factor cost (GNP-FC)

- To generate goods and services, the company needs land, labour, capital, and an entrepreneur. These factors are compensated in the form of rent, labour, interest, and profit in exchange for their services. Production cost, often known as factor cost, refers to the payments made to factors. It is cost from the standpoint of the firm, and it is income from the standpoint of the factors.
- The value of all final goods and services at market price produced within the domestic territory of the country in an accounting year, including net factor income from abroad less net indirect taxes, is defined as gross national product at factor cost.
- **GNP AT FACTOR COST = GNP AT MARKET PRICE-NET INDIRECT COST**
- The difference between indirect tax and subsidy is known as net indirect tax. The tax imposed on the production and sale of goods is known as indirect tax. Subsidies, on the other hand, lower the market price of commodities, whilst taxes raise it. After subtracting the subsidy from the indirect tax, the net indirect tax is computed. National disposable income is the same as GNP at factor cost.
- GNP at factor cost can also be calculated in another method. GNPPC= GDP at Factor cost+ Net factor income from abroad.

5.2 Significance

- The Gross National Product (GNP) is a means of determining how much a country's citizens contribute to its economy. It considers citizenship regardless of the location of the property.
- The money earned by foreign residents in the country is not included in the GNP.

5.3 Conclusion

The value of all final goods and services at market price generated within a country's home territory in an accounting year, including net factor income from abroad minus net indirect taxes, is defined as gross national product at factor cost.

6. Net National Product at Market Prices (NNP-MP)

NNP at market price is gross national product less depreciation at market price. The **market worth** of all **finished goods and services** generated by citizens of a nation living domestically and internationally during a year is known as the net national product or NNP at Market price. This article will explain to you the concepts related to the **Net National Product at Market Prices (NNP-MP)** which will be helpful in Indian Economy preparation for the IAS exam.

6.1 Net National Product at Market Prices (NNP-MP)

- The value of a country's people' contribution to economic output, minus depreciation but including net indirect taxes, is known as **NNP at market price**.
- The value obtained by removing depreciation from the **gross national product** (GNP) is known as **net national product at market price.**
- NNP (MP) = GNP (MP) – Depreciation
- The monetary worth of finished goods and services generated by a country's population, both domestically and internationally, in a given period is known as the **net national product (NNP).**
- To arrive at net national income at factor cost, we subtract the amount of indirect taxes from the money value of **NNP at market price or NNI.**

6.2 Significance

- **Fixed capital** is employed in the production of goods and services. Machines depreciate or become damaged due to wear and tear throughout the manufacturing process, and outdated machines become obsolete as a result of technological advancements.
- **Capital instruments** degrade over time owing to continual usage in the manufacturing process, and some must be replaced. To achieve Net National Product at Market Price, this depreciated value and replacement cost must be subtracted from **Gross National Product (GNP at MP).**
- The **NNP** is denominated in the national currency of the country it represents. That is, the NNP in the United States is expressed in dollars (USD), but the NNP in **European Union (EU)** member countries is expressed in euros (EUR).

6.3 Conclusion

NNP is frequently assessed on an annual basis as a tool to assess a country's ability to maintain minimal production levels. Although **Gross Domestic Product (GDP)** is the most widely used metric for measuring national income and prosperity, NNP is widely **employed in environmental economics.**

7. NNP at Factor Cost (NNP-FC)

The Net National Product at Factor Cost (NNP at Factor Cost) is the net money value of all goods and services produced by normal citizens of a country. It includes income earned by Indian citizens, whether they live in India or abroad. **National income** is also known as **Net National Product at Factor Cost**. The UPSC Indian Economic Syllabus includes NNP at Factor cost which is described in this article.

7.1 Net National Product at factor cost

- National income is the same as the net national product at factor cost. We get the net national product at factor cost by subtracting depreciation allowances from the gross national product at factor cost.
- **NNP at Factor cost = GNP at Factor Cost-Depreciation allowance**
- "The net national product at factor cost is the sum total of net values contributed by all producers in the country's local territory plus net factor income from outside," says Peterson.
- **NNP of Factor Cost = NDP at Factor Cost + Net Factor Income from abroad.**

Note: However, the Ministry of Statistics and Program Implementation's Central Statistics Office (CSO) defines National Income of India as Net National Income at Market Price.

7.2 Conclusion

- The Net National Product at Factor Cost (NNP at Factor Cost) is the net money value of all goods and services produced by ordinary citizens of a country.
- It includes income earned by Indian citizens, whether they live in India or abroad. It is calculated net of national income, which implies it excludes depreciation.
- It's also at factor cost, so it doesn't contain NIT (net indirect taxes). It is the national income of a country.

8. GVA at the Market Price

The Gross Value Added at market price is the difference between the **value of output and Intermediate Consumption**, where the value of output is the domestic sales. In simpler terms, it is the value-added of all goods and services in the economy. In this article, we will study GVA at market price, which is important for **UPSC** Examination.

8.1 What Is Gross Value Added (GVA)?

- Gross value added (GVA) is an **economic productivity metric** that measures a corporate subsidiary's, company's, or municipality's contribution to an economy, producer, sector, or region.
- GVA assigns a **monetary value to the number of goods and services produced in a country, less the cost of all inputs and raw materials** directly attributable to that production.
- GVA thus adjusts gross domestic product (GDP) for the impact of product subsidies and taxes (tariffs).

GVA at Market Price Formula
Gross Value Added at Market Price (GVA at MP) = Value of Output - Intermediate Consumption

8.2 Why GVA is important?

- GVA has gained importance under the new method of **GDP calculation** because it is a more accurate representation of economic activity on the ground. In its policy reviews, the **RBI, too, considers only GVA to express its economic projections.**
- Adjustments to the GVA number to arrive at GDP can throw the resultant number out of whack. **Under the old series, economic growth was measured by the growth in GDP at the factor cost.** The headline GDP growth rate is now adjusted for net indirect taxes.
- **Subsidies are deducted from GVA while indirect taxes are added.** This is to reflect the **cost borne by the consumer.** However, **GDP and GVA have told different stories at different points in time.**

8.3 Conclusion

Gross value added (GVA) at market prices is used widely as GVA and is used to understand the value-added in the economy at current market prices. This gives information and trends regarding the GDP through GVA at the factor cost by adjusting net indirect taxes.

9. GVA at Basic Prices

Gross value added at **basic prices** is output valued at basic prices minus intermediate consumption valued at purchasers' prices. The GVA is calculated using the price at which the production is valued. This article will explain to you the concepts related to the **GVA at basic prices** which will be helpful in Indian Economy preparation for the IAS exam.

9.1 GVA at basic prices

- The **concept of GVA at basic price**s comes from the **United Nations' System of National Accounts (SNA)**, which was first presented in 1993 and was updated in 2008 as part of a review of compilation and categorization methods.
- This was approved by **CSO** in its January 2015 base revision.
- The **basic price** is the amount a producer receives from a purchaser for a unit of a good or service provided as an output, less any tax owed and any subsidy owed to the producer as a result of its production or sale. It does not include any transportation costs billed individually by the producer.
- **Output valued at basic prices** minus **intermediate consumption** valued at purchasers' prices equals' **gross value added at basic prices.**
- The **GVA is calculated** using the **price** at which the production is valued. Purchasers' prices for inputs and basic prices for products show the prices actually paid and received from the producer's perspective.

9.2 Significance

- The **Central Statistical Organization (CSO)** revised its National Accounts data in January 2015, and it was agreed that sector-wise estimates of **Gross Value Added (GVA)** will now be given at basic prices rather than factor cost.
- In simple terms, the basic price for any commodity is the amount the producer receives from the consumer for a unit of the product less any tax and any subsidy on the product.
- **GVA at basic prices,** on the other hand, will include production taxes but exclude any commodity-specific production subsidies.
- **GVA at factor cost,** on the other hand, does not include any taxes and does not include any subsidies, whereas GDP at market prices includes both production and product taxes and removes both production and product subsidies.

- The relationship between **GDP at market prices** and GVA at basic prices is:
- **GVA at basic prices = GVA at factor cost + (Production taxes - Production subsidies)**
- Production taxes or subsidies are paid or received in relation to production and are not based on actual production volume. Land revenues, stamps and registration fees, and profession taxes are all examples of production taxes.
- Simply said, **GVA at basic pricing** is what the producer receives before the product is sold.
- The revenue received by the producer is not the same as the price paid by the consumer, because of the indirect taxes that are paid to the government, this is the case. Similarly, the consumer may be eligible for **food** or **gasoline subsidies.**
- GVA at basic prices will include production taxes but exclude any **commodity-specific production subsidies.**
- Both production and product taxes are included in GDP at market prices, while both production and product subsidies are excluded.

9.3 Conclusion

In simple terms, the basic price for any commodity is the amount the producer receives from the consumer for a unit of the product less any tax and any subsidy on the product. The ultimate value of the output can be used to calculate GDP. It can also be calculated as the sum of value additions made at various phases to arrive at the ultimate result.

10. GVA at Factor Cost

GVP at factor cost refers to the total worth of all final goods and services produced within a country's domestic territory during a year, including depreciation. It also refers to GDP at factor cost. GVA at factor cost did not include any taxes or subsidies. This article will explain to you the concepts related to the **GVA at factor cost** which will be helpful in Indian Economy preparation for the IAS exam.

10.1 GVA at factor cost

- The **Systems of National account (SNA)** does not employ the concept of **gross value added at factor cost directly.**
- The total value of all final goods and services produced within a country's domestic territory throughout a year, including depreciation, is referred to as the **GVP at factor cost**
- It can, however, be simply calculated from either **GVA at basic prices** or **GVA at producer's prices** by removing the value of any production taxes and adding production subsidies, which are paid out of gross value added as specified.
- Previously, India measured **GVA at 'factor cost'** until a new approach was implemented, with GVA at 'basic prices' becoming the key indicator of economic output.
- GVA at factor cost did not include any taxes or subsidies.
- **Gross value added (GVA) at basic prices** will be used instead of GDP at factor cost.

10.2 Significance

- It is simple to calculate from either **GVA at basic prices** or GVA at producer's prices by deducting the value of any production taxes and adding production subsidies, which are paid out of gross value added as specified.
- For example, **"other taxes on production"** that are not imposed per unit are the only taxes on production that continue to be paid out of gross value added at basic pricing. **Current taxes (or subsidies)** on the labour or capital employed in the business, such as payroll taxes or current taxes on vehicles or buildings, are the most common.
- By removing additional **production taxes** and adding **production subsidies,** gross value added at factor cost can be calculated from gross value added at basic prices.

10.3 Drawbacks

- The problem with gross value added at **factor cost** is that there is **no observable set of prices** from which gross value added at factor cost may be calculated simply by multiplying this set of prices by the sets of output quantities.
- Other production **taxes or subsidies** are not, by definition, taxes or subsidies on products that can be removed from input and output prices.
- As a result, despite its name, gross value added at factor cost is **not precisely a measure of value added**; rather, it is primarily a **measure of income** rather than output.
- It is the amount of gross value added that is left over for distribution after all taxes and subsidies have been paid on production.

10.4 Conclusion

GVA at factor cost makes no difference which measure of gross value added is used to calculate this income measure because the only difference between the two measures of value added discussed above is the amount of production taxes or subsidies that must be paid out of gross value added.

Chapter 6: GDP Calculation Methods

1. Nominal GDP

Nominal GDP can be defined as the value of all the goods and services used to calculate the GDP of the country **at the current prices**. The current prices mean prices in the year in which the GDP is to be found out. Nominal GDP is an important concept to understand for the UPSC IAS Exam.

1.1 Nominal GDP

- To calculate the **Gross Domestic Product (GDP)** we consider the value of all the goods and services produced in the country in a particular financial year. A financial year starts on **April 1st and ends on March 31st.**
- Nominal GDP is the value of all goods and services used in calculating GDP at the current prices.
- For instance, if the nominal GDP is calculated for the year 2019-2020, then the prices during the year 2019-2020 must be considered for calculating the nominal GDP.
- Consider a country producing only 10 units of cloth of 10 crores each in 2019-2020. Therefore the nominal GDP for 2019-2020 is 100 crores.
- However, in reality, the calculation of GDP is not that easy as the number of goods and services are in huge numbers in the range of hundreds of thousands.

Facts: In the year 2020-21, nominal GDP, or GDP at current prices, is expected to reach **197.46 lakh crore for India.**

1.2 Conclusion

Nominal GDP generally represents the size of the economy and can be used to compare a quarter-on-quarter growth of the economy. Nominal GDP is used to compare economies by removing the bias created by the base year and gauging the growth based on current prices.

2. Real GDP

Real GDP can be defined as the value of all the goods and services used to calculate the GDP of the country at the **base year prices**. In other words, it can be said that Real GDP is the GDP of the country adjusted to inflation. The Real GDP is calculated at base year prices to negate the effect of inflation and have a reasonable comparison. Real GDP is an important concept to understand for the UPSC IAS Exam. In this article, we will see the meaning of nominal GDP and a few examples of the same.

2.1 Real GDP

- To calculate the Gross Domestic Product (GDP) we consider the value of all the goods and services produced in the country in a particular financial year. A financial year starts on **April 1st and ends on March 31st.**
- Real GDP is the value of all goods and services used in calculating GDP at the **base year prices.**
- Let us consider an example if we have to find the Real GDP of the economy in 2020-2021 with the base year of 2019-2020.
- Let us consider a country producing only 10 units of cloth of 10 crores each in 2019-2020. Therefore the nominal GDP for 2019-2020 is 100 crores and the Real GDP is also 100 crores.
- The price of cloth has increased to 11 crores in 2020-2021 and the country still produces 10 units of cloth.
- Therefore, nominal GDP in 2020-2021 is 10 units multiplied by 11 crores which gives us a nominal GDP of 110 crores.
- The real GDP of 2020-2021 considers the 2019-2020 price of the cloth which is 10 crores, therefore for 10 units of cloth produced the Real GDP is 100 crores.
- Though there is a growth of 10 crores in nominal terms, it is because of inflation. The Real GDP growth in the above case is zero.

Facts: In the year 2020-21, real GDP or Gross Domestic Product (GDP) at constant prices (2011-12) is predicted to be **Rs 135.13 lakh crore for India.**

2.2 Conclusion

Real GDP represents the growth of the economy. Real GDP is used to compare different financial years to understand the growth of the economy. To achieve accurate values of the Real GDP the base year has to be as close to the calculating year as possible to reduce the errors caused in calculation due to the base year effect.

3. Nominal GDP and Real GDP

The difference between Nominal GDP and Real GDP is that **Nominal GDP is calculated at current prices and Real GDP is adjusted for inflation**. In simpler words, Nominal GDP is the value of goods and services produced in the country in the past year at current prices. On the other hand, Real GDP is the value of goods and services produced in the country in the past year calculated at base-year prices. In this article let us see what nominal and real GDP with examples is and look at the difference between them.

3.1 Nominal GDP

- The value of all goods and services used in calculating GDP at the current price is called the nominal GDP.
- Current prices mean prices in the year of GDP calculation. If we are calculating the GDP of 2019-2020, then calculating GDP at 2019-20 prices gives nominal GDP.

For instance, consider a country producing only 10 units of cloth of 10 crores each in 2019-2020. Therefore the nominal GDP for 2019-2020 is 100 crores.

3.2 Real GDP

- The Value of all goods and services used in calculating GDP at the base year price is called the Real GDP. It can also be understood as Nominal GDP adjusted for the inflation compared to the base year gives Real GDP.
- Let us consider an example if we have to find the Real GDP of the economy in 2020-2021 with the base year of 2019-2020.
- Using the previous example, the price of cloth has increased to 11 crores in 2020-2021 and the country still produces 10 units of cloth.
- Therefore, nominal GDP in 2020-2021 is 10 units multiplied by 11 crores which gives us a nominal GDP of 110 crores.
- The real GDP of 2020-2021 considers the 2019-2020 price of the cloth which is 10 crores, therefore for 10 units of cloth produced the Real GDP is 100 crores.

3.3 Difference between Nominal GDP and Real GDP

Parameter	***Nominal GDP***	***Real GDP***
Meaning	Nominal GDP is the money value of all goods and services used in calculating GDP at the current price	Real GDP is the money value of all goods and services used in calculating GDP at the base year price
Calculation	Nominal GDP includes inflation value	Real GDP doesn't include inflation value
Represented in	Current Year Prices	Base Year Prices
Indicates	Absolute increase in value of goods in a year or size of the economy	Real increase in productivity or growth of the economy
Used to compare	Inflation across different quarters in the same year	GDP growth for different financial years
Growth Analysis	It is not explicitly visible without knowing the inflation status	Gives a clear indication of growth or slowdown in the economy

3.4 Conclusion

Nominal GDP generally represents the size of the economy; however, the Real GDP represents the growth of the economy. To achieve accurate values of the Real GDP the base year has to be as close to the calculating year as possible to reduce the errors caused in calculation due to the base year effect.

4. GDP Deflator

The **GDP Deflator** measures the average change of prices of all goods and services in the economy. The GDP Deflator is also known as the **Price Deflator** and **Implicit Price Deflator.** It is an indication of overall inflation across all goods and services in the economy compared to the base year. The topic of GDP Deflator is important for UPSC IAS Exam. In this article let us see what is GDP Deflator, the formula to calculate GDP Deflator and the difference between GDP Deflator and Inflation.

4.1 GDP Deflator

- The total output of goods and services is referred to as the **gross domestic product (GDP).**
- However, the statistic does not account for the impact of inflation or rising prices when GDP rises and declines.
- The GDP price deflator tackles this by demonstrating the impact of price changes on GDP by first defining a **base year** and then comparing **current prices** to base year prices.
- Simply expressed, the GDP price deflator indicates how much a change in GDP is influenced by price increases.
- It tracks the prices paid by businesses, the government, and consumers to reflect the magnitude of price level fluctuations, or inflation, within the economy.

4.2 Formula of GDP Deflator

Example: If the nominal GDP is 110 crores and the real GDP is 100 crores then the GDP Deflator is given by

GDP Deflator = 110/100 x 100 = 110

- This indicates that the overall economy has undergone inflation which is an increase in price levels.
- If the GDP Deflator is 100 and less than 100 then it indicates that there is zero average inflation and deflation or reduction of prices across the economy respectively.

4.3 Difference between GDP and Inflation

Parameter	*GDP Deflator*	*Inflation*
Meaning	The changes in prices for all of the goods and services produced in an economy.	The changes in prices for certain goods and services are used for the calculation of Inflation.
Index	Represented as GDP Deflator	Represented as Consumer Price Index (CPI) and Wholesale Price Index (WPI)
Number of Items used to calculate	All goods and services in the economy.	Approximately 700 for WPI and 450 for CPI
Published by	Ministry of Statistics and Programme Implementation (MoSPI)	CPI: Central Statistic Office (MoSPI) WPI: Office of Economic Advisor (Ministry of Commerce)

4.4 Significance of GDP Deflator

- Economists can compare the amount of real economic activity from one year to the next by using the GDP price deflator.
- When compared to other measures such as the **consumer product index (CPI)** and the **wholesale price index (WPI)**, it is much broader.
    - It computes inflation for the entire economy, rather than just a basket of specific goods, as CPI or WPI do.
- Any shift in consumption patterns or structural reforms is factored directly into the GDP deflator. Although CPI and WPI are available on a monthly basis, they do not provide a clear picture of economic inflation.
- As people respond to changing prices, new expenditure patterns are allowed to appear in the deflator.

4.5 Conclusion

GDP Deflator is an index that measures the price level changes of all goods and services in the economy as a whole. Comparing it to inflation indices such as CPI and WPI will give insights regarding the general price level changes apart from items captured by WPI and CPI.

5. GDP and Welfare

Gross Domestic Product (GDP) is the price value of all the goods and services produced in a country in the past year. GDP per capita is a measure of how developed a country is. **Welfare** on the other hand is the overall wellbeing of the society including happiness, health, and economic wellbeing. GDP and Welfare are interconnected with each other. In this article, let us see the interrelationship between GDP and welfare and whether GDP indicates welfare.

5.1 Interrelation between GDP and Welfare

- Increasing the GDP of any country will result in **more GDP per capita**.
- More GDP per capita means more income to the people which they can spend on their basic necessities such as food, clothing, shelter, education, and healthcare.
- More income would result in **more tax revenue for the government** as well, which they can again spend on public welfare.
- Many Scandinavian countries attained development and welfare through increased GDP.

5.2 GDP is not a clear measure of Welfare

- GDP only mentions GDP per capita and whether a country's economy is growing or not.
- Increasing GDP per capita **doesn't give a picture of rising inequality or poverty** in an economy.
- For instance, according to the Oxfam report between 2000 and 2019, India's per capita gross domestic product (GDP) increased fivefold, from $443 in 2000 to $2014 in 2019.
- This doesn't mean it was distributed evenly, the 1% of the people accumulated 21 % of the total income of 2019 which shows grave inequality.
- **More GDP doesn't translate into more happiness**, despite being one of the world's wealthiest countries, the United States ranks 19th in terms of happiness.

5.3 Conclusion

The Gross Domestic Product (GDP) is a measure of a country's economic growth rather than welfare. The increasing GDP has to be distributed evenly by the government to ensure that inequality and poverty are reduced in society.

6. Value Added Method

Value Added Method of National Income calculation is estimated at the **production level**. The value-added at each producing unit is calculated to estimate the overall value-added in producing goods and services in the economy. The **net-factor income from the rest of the world** is added to this to estimate the National Income.

National Income Estimation is an important topic for UPSC IAS Exam Economy Subject for Prelims and General Studies Paper 3 in Mains. In this article let us see what is the value-added method, how to calculate national income by value-added method and the precautions to be taken while estimating by this method.

6.1 Value Added Method

- This method is used to estimate national income at the production level.
- National income is the value of final products and services generated in a country's domestic territory plus net factor income from the rest of the world at the production level (ROW).
- The goods and services produced by each producing unit is the gross output value at market prices.
- To calculate the net value added at **factor cost** (of all producing units) we deduct the value of intermediary goods, net indirect taxes and the depreciation value. This is the **Net Domestic Product at factor cost.**
- Net Factor Income from the rest of the world is added to the net domestic product at factor cost to get **Net National Product at factor cost.**

6.2 How to calculate National Income by Value Added Method?

In this method following steps are involved:

1. To begin, all of an economy's producing firms are divided into three industrial sectors based on their activities. These are the following:
    - **Primary sector:** The primary sector is made up of production units that rely on natural resources. Agriculture, forestry, fishing, mining, and other productive enterprises are included.
    - **Secondary sector:** This sector includes those manufacturing units that convert inputs into outputs, such as turning wood into a chair. Construction, manufacturing, electricity, gas, and water supply are all part of it.
    - **Tertiary sector:** This sector's producing units provide a wide

range of services, including banking, trade, and transportation. This is often referred to as the **service sector.** Transportation, communication, and banking services are all part of this industry.

2. Each producing unit of the economy's net value added is determined from its gross value of output, which is calculated by multiplying the entire volume of items produced by their prices.
    - We acquire the net value added at **factor cost (FC)** of the producing units by subtracting the sum of the value of **intermediate goods (IG), depreciation, and net indirect taxes (NIT)** from the value of output. **Or**
    - **Net value added at FC = Gross value of output - IG - Dep - NIT**
    - We derive the net value added at FC of a sector by aggregating the net value added at FC of all the producing units in that sector.
    - Net Domestic Product at Factor Cost is calculated by adding the net value added at FC of all three sectors in a country's domestic territory.
3. Finally, adding net factor income from ROW to **net domestic product (NDP)** at factor cost yields **net national product (NNP)** at factor cost.
    - NDP at FC will be more than net national product at factor cost (National Income) if net factor income from ROW is negative, and national income will be bigger than NDP at FC if it is positive.

6.3 Illustration

To understand better let us consider a numerical illustration to calculate the Net National Product at Factor Cost.

Calculate the Net National Product at Factor Cost if the (i) Gross value of output at Market Price 10000 (ii) Depreciation 500 (iii) Indirect taxes 750 (iv) Economic subsidies 150 (v) Intermediate consumption 3600 (vi) Net factor income from ROW 250

We know that,

Net value added at FC (Net Domestic Product at Factor Cost) = Gross value of output - IC - Dep - NIT

To calculate Net Indirect Taxes we deduct subsidies from indirect taxes.

=> Net Indirect Taxes (NIT) = 750 - 150 = 600

$\therefore$ Net Domestic Product at Factor Cost = 10000 - 3600 - 500 - 600

=> Net Domestic Product at Factor Cost = 10000 - 4700 = 5300

To get Net National Product at Factor Cost we need to add net factor income to Net Domestic Product at Factor Cost.

∴ Net National Product at Factor Cost = Net Domestic Product at Factor Cost + Net Factor income

=> Net National Product at Factor Cost = 5300 + 250 = 5550

6.4 Precautions while using Value Added Method

- **Self-consumption output:** That output that is produced for self-consumption and whose value can be assessed must be included in the production estimates because it is part of the current year's production.
- **Sale of second-hand products:** Because the value of these commodities had previously been included in national income, the sale of second-hand goods should not be included in national income.
- **Commissions paid to brokers** for the sale and purchase of used items should be included because they are payments for services rendered in the current year.
- **Intermediate Items:** It is not necessary to add the value of intermediate items because this would result in double counting.
- **Housewife services** should not be included because evaluating them is difficult.

6.5 Conclusion

Value Added Method of National Income estimation is one of the simplest methods to calculate the Net National Product. However, there are instances of double-counting while calculating the value-added in the case of items like second-hand products. Therefore necessary care must be taken while calculating the National Income by Value Added Method.

7. Expenditure Method

Expenditure Method of National Income estimation used the final expenditure on finished items from all sectors of the economy. The different sectors expenditures include Private final consumption expenditure, Government final consumption expenditure, Gross Investment and Net exports (Exports - Imports). The **net-factor income** from the rest of the world is made use to estimate the National Income.

The expenditure method of National Income estimation is important along with value-added and income-based methods for the UPSC IAS Exam. In this article, let us see what is the expenditure method, how to calculate national income by expenditure method and the precautions to be taken while estimating by this method.

7.1 Expenditure Method

- The expenditure method can also be used to calculate national income during the **disposition phase**.
- It calculates national income by calculating final expenditure on GDP at market prices. Final expenditure refers to money spent on finished items.
- The goods that are demanded for final consumption and investment are known as final goods.
- All four sectors of the economy, namely households, businesses, the government, and the rest of the world, create demand for final consumption and investment.
- From the estimated GDP at market prices after summing up all final expenditures, we deduct net indirect taxes and the consumption of fixed capital (depreciation) to get the Net Domestic Product at Factor Cost.
- **Net Factor Income** from the rest of the world is added to the **net domestic product at factor cost** to get **Net National Product at factor cost.**

7.2 How to calculate National Income by Expenditure Method?

The main steps involved in measuring national income by this method are:

- Calculate the following expenditures on all sectors of the economy's ultimate products.
  - Final consumption expenditure in the private sector.
  - Final consumption expenditures by the government.
  - Gross Investment

- Net Exports (exports - imports).

- Gross domestic product at market price is the sum of all the aforementioned expenditures on final products across all sectors of the economy.
- Next, subtract **fixed-capital consumption (depreciation)** and **net indirect taxes** from the gross domestic product at market prices to arrive at the **net domestic product at factor cost.**

NDPFC = GDPmp - Consumption of fixed capital - Net indirect tax (indirect taxes - subsidies)

- Finally, add net factor income from overseas to the net domestic product at factor cost to get the net national product at factor cost, which is national income.

NNPFC (National Income) = NDPfc + Net factor income from abroad

7.3 Illustration

To understand better let us consider a numerical illustration to calculate the Net National Product at Factor Cost.

Calculate national income from the data given below by expenditure method.

Item (In crores) - (i) Personal consumption expenditure 3500 (ii) Consumption of fixed capital 50 (iii) Net fixed capital formation 1250 (iv) Change in stock 500 (v) Exports 400 (vi) Imports 750 (vii) Net indirect taxes 40 (viii) Governments' consumption expenditure 1600 (ix) Net factor income from abroad (-) 10

We know that,

NDPFC = GDPmp - consumption of fixed capital - Net indirect tax (indirect taxes - subsidies)

Gross investment = Net fixed capital formation + Change in stock = 1250+500 = 1750

Net Exports = Exports - Imports = 400-750 = -350

GDP at market price is given by adding private final consumption expenditure, Government final consumption expenditure, Gross Investment and Net exports (Exports - Imports)

GDP at market price = 3500+1600+1750-350=6500

∴ NDPFC = GDPmp - consumption of fixed capital - Net indirect tax (indirect taxes - subsidies)

=> NDPFC = 6500-50-40 = **6410**

To get Net National Product at Factor Cost we need to add net factor income to Net Domestic Product at Factor Cost.

∴ Net National Product at Factor Cost = Net Domestic Product at Factor Cost + net factor income

=> **Net National Product at Factor Cost = 6410 - 10 = 6400**

7.4 Precautions while using Expenditure Method

The main precautions required to be taken in estimating national income by expenditure method are:

- To **avoid double-counting**, expenditure on intermediary items should not be included.
- **Transfer payments**, such as gifts, contributions, taxes, and scholarships, should not be included in national income.
- **Expenditure on the purchase of used goods** should not be included because the cost of these items has already been deducted when they were purchased for the first time.
- **Bond and stock purchases** should not be included because they are financial activities.

7.5 Conclusion

The expenditure Method of National Income estimation uses the final expenditures. However, these methods have certain drawbacks of double counting when expenditure is calculated at the intermediary levels. Moreover, expenditure across different levels is not available in a transparent manner.

8. Income Method

Income Method of National Income Estimation uses the income paid to all factors of production at the **distribution level**. This sum gives the **net domestic product at factor cost** or **net value added at factor cost**. To obtain the net national income the **net factor income** from the rest of the world is added to it.

The income method is one of the methods of national income estimation and is important for UPSC IAS Exam. In this article, let us see what is the income method, how to calculate national income by income method and the precautions to be taken while estimating by this method.

8.1 Income Method

- At the **distributional level**, the income method is used to calculate national income.
- National income is calculated using this method by summing the incomes obtained by all factors of production for their factor services over the course of a year.
- This sum gives the net domestic product at factor cost or net value added at factor cost.
- To obtain the net national income the net factor income from the rest of the world is added to it.

8.2 How to calculate National Income by Income Method?

- To begin, divide the production units into three categories: **primary, secondary, and tertiary**. The classification is identical to that used in the value-added approach.
- Calculate the following factor incomes paid out by each industrial sector's production units.
    - Employees' remuneration
    - Rent
    - Interest
    - Profit
    - Accounting
    - Mixed-income of self-employed.
- The total of the above factor incomes paid out equals the industrial sectors' net value added at factor cost.
- Add together all of the industrial sectors' factor payments to get the net domestic product at factor cost.

- Finally, to arrive at net national product at factor cost, add net factor income from overseas to the net domestic product at factor cost.

8.3 Illustration

To understand better let us consider a numerical illustration to calculate the Net National Product at Factor Cost.

Calculate national income from the data given below by the income method.

Item (In crores) - (i) Employers contribution to social security 75 (ii) Interest 160 (iii) Rent 130 (iv) Dividends 45 (v) Undistributed profit 10 (vi) Net factor income from abroad –10 (vii) Wages and salaries 450

We can say that, **NDPFC = (i)+(ii)+(iii)+(iv)+(v)+(vii)**

∴ NDPFC = 75+160+130+45+10+450

=> **NDPFC = 870**

To get Net National Product at Factor Cost we need to add net factor income to Net Domestic Product at Factor Cost.

∴ Net National Product at Factor Cost = Net Domestic Product at Factor Cost + net factor income

=> **Net National Product at Factor Cost = 870 - 10 = 860**

8.4 Precautions while using Income Method

The following are some of the most important precautions to take when using the income distribution method to estimate national income.

- When calculating employee compensation, all benefits accruing to the employees, whether in cash or in-kind, must be taken into account.
- Only interest on loans taken for production should be included in interest estimates; interest on loans taken for consumption is not included in national income since it is treated as a transfer payment.
- Gifts, gifts, charities, taxes, fines, lottery winnings, and other transfer earnings are not factor incomes. These should not be taken into account when calculating national income.
- Revenue from the sale of used products should not be included because it is not revenue from goods created in the current year.

8.5 Conclusion

Income Method of National Income is one of the simplest methods of estimation of Net National Product at factor cost. However necessary precautions must be taken to ensure few payments must be exempted as well as added. This will ensure that the estimate is accurate enough and closer to other methods of income estimation.

9. Methods of Calculating National Income

The value of goods and services produced by a country throughout a fiscal year is referred to as **National Income**. We have different methods to calculate national income. The most important methods of calculating national income are **Value Added method, Income method and Expenditure method.**

The understanding of methods of calculating national income is very important for the UPSC IAS Exam. In this article, we will see how national income is calculated and the methods of calculating national income.

9.1 How is National Income calculated?

- Goods and services are produced by the production units.
- They do it by utilising four production factors: **land, labour, capital, and entrepreneurship.**
- These four components of production work together to create goods and services, adding value to existing goods.
- This additional value, or net domestic product, is dispersed among the owners of the four components of production, who receive rent, employee compensation, interest, and profit in exchange for their contribution to the production of products and services.
- The profits earned by the owners of the factors of production are used to acquire goods and services from the production units for consumption and investment.
- In a nutshell, manufacturing generates revenue. Income is utilised to fund spending, and spending, in turn, fuels more production.
- As a result, there are three ways to calculate national income.
    1. Value Added Method
    2. Income Method
    3. Expenditure Method

9.1.1 *Value Added Method*

- This method is used to estimate national income at the **production level.**
- National income is the value of final products and services generated in a country's domestic territory plus **net factor income** from the rest of the world at the production level.
- The goods and services produced by each producing unit is the gross output value at market prices.

- To calculate the net value added at **factor cost** (of all producing units) we deduct the value of **intermediary goods**, **net indirect taxes** and the **depreciation value**. This is the **Net Domestic Product at factor cost.**
- Net Factor Income from the rest of the world is added to the net domestic product at factor cost to get **Net National Product at factor cost.**

9.1.2 *Income Method*

- At the **distributional level**, the income method is used to calculate national income.
- National income is calculated using this method by summing the incomes obtained by all factors of production for their factor services over the course of a year.
- This sum gives the net domestic product at factor cost or net value added at factor cost.
- To obtain the net national income the net factor income from the rest of the world is added to it.

9.1.3 *Expenditure Method*

- The expenditure method can also be used to calculate national income during the **disposition phase.**
- It calculates national income by calculating **final expenditure** on GDP at market prices. Final expenditure refers to money spent on finished items.
- The goods that are demanded final consumption and investment are known as **final goods**.
- All four sectors of the economy, namely households, businesses, the government, and the rest of the world, create demand for final consumption and investment.
- From the estimated GDP at market prices after summing up all final expenditures, we deduct net indirect taxes and the consumption of fixed capital (depreciation) to get the **Net Domestic Product at Factor Cost.**
- **Net Factor Income** from the rest of the world is added to the net domestic product at factor cost to get Net National Product at factor cost.

9.2 Conclusion

The calculation of National Income is a very complex process. The above methods for national income estimation are used to ensure that there are no double-counting and missing entries from the factors of production. The national income is calculated at factor cost.

Chapter 7: Economic Growth and Development

1. Economic Growth and Economic Development

Even though the terms **economic development** and **economic growth** sound similar, there is a significant difference between the two. While both economic growth and economic development are important indicators of a country's **economic health**, there are important distinctions between the two.

Economic growth is a relatively **narrow concept**. It entails a **quantitative increase** in output, whereas economic development includes qualitative changes such as social attitudes and customs, in addition to **quantitative growth in output or national income**. Economic development is nearly impossible to imagine without growth.

In this article, we will understand what these two terms mean and why we should know the difference between the two.

1.1 Economic Growth

- **Economic growth** is defined as an **increase in the production** of economic goods and services from one period of time to another.
- **Economic growth denotes an increase in both national income and per capita income.**
- The increase in per capita income is a better measure of Economic Growth because it reflects an improvement in the living standards of the masses.
- Let's consider that a unique berry only grows naturally in the land of Utopia. This berry has been utilised by natives of Utopia for many years, but a wealthy German traveller recently found it and took samples back to Germany. Because his German acquaintances like the berry, the tourist invested in a major berry exporting company in Utopia. Hundreds of Utopians were engaged by the new berry exporting company to farm, harvest, wash, box, and ship the berries to German supermarkets.
- Because the total value of the goods and services generated by the new berry exporting business exceeded one million dollars in a calendar year, the berry exporting business added over one million dollars to Utopia's GDP. Utopia's GDP increased, indicating that the country achieved economic growth.

- Economic growth is defined as an increase in **real national income** rather than an increase in money income or **nominal national income**.
- In other words, the increase should be based on an increase in the output of goods and services rather than a simple increase in the market prices of existing goods.
- **Real income** should rise gradually over time: The rise in real national income and per capita income should be sustained over time.
- Seasonal or temporary income increases should not be confused with economic growth.
- Income growth should be based on increased productive capacity.
    - Increases in income can only be sustained if they are the result of a long-term increase in the economy's productive capacity, such as:
    - modernization or the use of new technology in manufacturing, infrastructure strengthening such as transportation networks, improved electricity generation, and so on.
- **Capital goods, labour force, technology, and human capital** all have the potential to contribute to economic growth.

1.2 Economic Development

- **Economic development** is defined as a sustained improvement in society's material well-being.
- Few indicators of economic development are qualitative indicators such as the HDI (Human Development Index), gender-related indexes, Human Poverty Index (HPI), infant mortality, literacy rate and so on.
- From the above example of Utopia, before the berry exporting business, most Utopians lived in small settlements spread out over many miles. Only a small percentage of Utopians had access to schools, clean water, or healthcare. To feed their immediate families, utopian men worked long hours attempting to harvest land that was naturally unsuited for most crops.
- After the export of berries and an increase in the government's revenue, Utopians will get better access to schools, clean water and affordable healthcare. The export industry provides better wages and fixed working hours. Utopia's development indicators such as literacy rate, per capita income and access to healthcare, improve indicating economic development.
- Economic development encompasses a broader range of concepts than economic growth.
- Aside from national income growth, it includes **social, cultural,**

political, and economic changes that contribute to material progress.

- It includes changes in resource supplies, capital formation rates, population size and composition, technology, skills, and efficiency, as well as institutional and organisational structure.
- These changes contribute to the larger goals of ensuring more equitable income distribution, increased employment, and poverty alleviation.
- It is a long chain of interconnected changes in fundamental supply factors and demand structure that leads to an increase in a country's net national product in the long run.

1.3 Economic Growth vs Economic Development

Basis of Comparison	***Economic Growth***	***Economic Development***
Meaning	Economic growth is defined as an increase in the country's real output of goods and services.	Economic development entails changes in income, savings, and investment, as well as gradual changes in the country's socio-economic structure (institutional and technological changes).
Factors	Growth is defined as a gradual increase in one of the components of GDP: consumption, government spending, investment, and net exports.	Development related to human capital growth, a reduction in inequality numbers, and structural changes that improve the population's quality of life.
Measurement/ Example	Economic growth is measured quantitatively by factors such as real GDP growth or per capita income growth.	To assess economic development, qualitative indicators such as the HDI (Human Development Index), gender-related indexes, Human Poverty Index (HPI), infant mortality, literacy rate, and so on are used.
Effect	Quantitative changes in the economy are brought about by economic growth.	Economic development results in both qualitative and quantitative changes in the economy.
Relevance	Economic growth reflects national or per capita income growth.	Economic development reflects progress in a country's quality of life.

1.4 Why Economic Growth and Economic Development are important?

- Economic growth is a widely used term in economics that is useful not only for national-level economic analyses and policymaking but also for comparative economics.
- International financial and commercial institutions base policymaking and future financial planning on the available growth rate data for the world's economies.

- The most important aspect of growth is its **quantifiability**, or the ability to quantify it in absolute terms.
- Just as we need to make conscious efforts to increase our income and growth, we also need to make conscious efforts to increase our economic development and higher economic development.
- Development has not been possible anywhere in the world without a **conscious public policy**.
- Similarly, we can say that there can be no development without growth.
- If economic growth is used properly for development, it will re-accelerate growth and eventually bring a larger population into the development arena.
- Similarly, high growth with low development leads to a decline in growth.

1.5 Conclusion

- Economic development is a subset of economic growth. Economic development encompasses a broader scope than economic growth.
- Economic development employs a variety of indicators to assess the state of an economy as a whole; however, economic growth employs only a few indicators for calculation, such as gross domestic product, individual income, and so on.
- Economic Growth is frequently contrasted with Economic Development, which can be defined as an increase in an economy's or nations economic wealth for the benefit of its residents.
- It should be noted that economic growth is necessary but not the only condition for economic development.

2. Factors Affecting Economic Growth

Economic growth is the change – increase or decrease in the value of goods and services produced by an economy. It needs to be measured as government and private sector decisions and policies need a base for their actions. All important aspects of the economy are linked to growth: **tax collections, interest rates; inflation and its expectations; employment; foreign trade** and so on.

Without measuring growth, there is no rationality in behaviour – both public and private. Investment decisions depend on the growth and inflation rate, to give one example. That is the reason for the Central Statistics Office (CSO) (**now National Statistical Office**) of India to project growth figures weeks before the Union Budget is presented facilitating rational projection of revenues and expenditure which in turn influences the private sector decisions.

2.1 Factors

Economic growth is a highly complex phenomenon that is influenced by a wide range of factors, including political, social, and cultural factors. These elements are as follows:

2.1.1 *Economic Factors*

2.1.2.1 *Natural Resources*

- Natural resources are the most important factor influencing an economy's development.
- Natural resources include land area and **soil quality, forest wealth, a good river system, minerals and oil resources, a favourable climate**, and so on.
- The abundance of natural resources is critical for economic growth. A country lacking in natural resources may be unable to develop rapidly.

2.1.2.2 *Capital Formation*

Capital formation is the process by which a community's savings are channelled into investments in capital goods such as **plants, equipment, and machinery, which increases a country's productive capacity** and worker efficiency, ensuring a greater flow of goods and services in a country.

2.1.2.3 *Technological Progress*

- Technological progress primarily entails **research into the use of new and improved methods of production** or the improvement of existing methods.

- Natural resources are sometimes made available as a result of technological progress. However, in general, technological progress leads to increased productivity.

2.1.2.4 *Entrepreneurship*

Entrepreneurship entails the ability to identify new investment opportunities, as well as the willingness to take risks and invest in new and growing business units.

2.1.2.5 *Human Resources Development*

- A good quality of population is critical in determining the level of economic growth.
- As a result, investment in human capital in the form of educational, medical, and other social schemes is highly desirable.

2.1.2.6 *Population Growth*

- The **increase in labour supply** is a result of population growth, which creates a larger market for goods and services. As a result, more labour produces more output, which a larger market absorbs.
- Output, income, and employment continue to rise as a result of this process, and economic growth improves.

2.1.2.7 *Social Overheads*

- The provision of social overheads such as schools, colleges, technical institutions, medical colleges, hospitals, and public health facilities is another important determinant of economic growth.
- Such facilities help the **working population to be healthier, more efficient, and responsible**.

2.3 *Non-Economic Factors*

2.1.3.1 *Political Factors*

- Political stability and strong administration are critical to modern economic growth.
- A stable, strong, and efficient government, honest administration, transparent policies, and their efficient implementation foster investor confidence and attract domestic and foreign capital, resulting in faster economic development.

2.1.3.2 *Social and Psychological Factors*

- Social factors include **social attitudes, social values, and social**

institutions, which change as education expands and cultures shift from one society to the next.

- Modern ideology, values, and attitudes result in new discoveries and innovations, as well as the rise of new entrepreneurs.

2.1.3.3 *Education*

It is now widely acknowledged that education is the primary means of development. Greater progress has been made in countries where education is widely available.

2.1.3.4 *The desire for Material Betterment*

- The desire for material advancement is a necessary prerequisite for economic development.
- Societies that place focus on self-satisfaction, self-denial, and faith in fate, limit risk and enterprise, causing the economy to stagnate.

2.2 Measures Taken to ensure Economic Growth

- Economic growth can be achieved when the rate of increase in total output exceeds the rate of increase in a country's population.
- A country's **human resources** should be sufficient in number and equipped with the necessary skills and abilities in order to achieve economic growth.
- The efficient utilisation or exploitation of **natural resources** is dependent on human resource skills and abilities, the technology used, and the availability of funds. A country with a skilled and educated workforce and abundant natural resources propel its economy forward.
- **Capital formation** increases the availability of capital per worker, which raises the capital/labour ratio even further. As a result, labour productivity rises, leading to an increase in output and economic growth.
- **Technological advancement** aids in increasing productivity with limited resources. Countries that have worked in the field of technological development grow faster than countries that have placed less emphasis on technological development. The selection of appropriate technology is also important for an economy's growth.
- **Social and political factors** play an important role in a country's economic growth.
    - Social factors include customs, traditions, values, and beliefs, all of which contribute significantly to an economy's growth.
    - A society with traditional beliefs and superstitions, for example,

is resistant to adopting modern ways of life. Achieving becomes difficult in such a situation.

- Aside from that, political factors such as government participation in policy formulation and implementation play a significant role in economic growth.

2.3 Conclusion

- Sustained economic growth in a country has a positive impact on national income and employment levels, resulting in higher living standards.
- Aside from that, it plays an important role in stimulating government finances by increasing tax revenues.
- Economic growth in a country is possible if the economy's strengths and weaknesses are properly assessed.

3. Economic Factors Affecting Economic Growth

Economists generally agree that **economic factors affecting economic growth and development** are: **human resources, physical capital, natural resources, technology development, entrepreneurship, population growth and social overheads.** In this article, we will discuss in detail regarding the various economic factors and what measures need to be taken for ensuring economic growth.

3.1 Economic Factors

3.1.1 *Natural Resources*

- Natural resources are the most important factor influencing an economy's development.
- Natural resources include land area and **soil quality, forest wealth, a good river system, minerals and oil resources, a favourable climate**, and so on.
- The abundance of natural resources is critical for economic growth. A country lacking in natural resources may be unable to develop rapidly.
- However, the availability of abundant natural resources is a necessary but not sufficient condition for economic growth.
- Natural resources are unutilised, underutilised, or misutilised in developing countries. One of the reasons for their backwardness is this only.
- Countries such as **Japan, Singapore**, and others, on the other hand, are not endowed with abundant natural resources, but they are among the world's developed nations.
- These countries have demonstrated a commitment to preserving available resources, putting forth their best efforts to manage resources, and **minimising wastage of resources**.

3.1.2 *Capital Formation*

- Capital formation is the process by which a community's savings are channelled into investments in capital goods such as **plant, equipment, and machinery, which increases a country's productive capacity** and worker efficiency, ensuring a greater flow of goods and services in a country.
- The process of capital formation implies that a community does not spend its entire income on goods for current consumption, but rather

saves a portion of it and uses it to produce or acquire capital goods that significantly increase the nation's productive capacity.

3.1.3 *Technological Progress*

- Technological progress primarily entails **research into the use of new and improved methods of production** or the improvement of existing methods.
- Natural resources are sometimes made available as a result of technological progress. However, in general, technological progress leads to increased productivity.
- In other words, technological advancement increases the ability to make more effective and fruitful use of natural and other resources for increasing output.
- It is possible to obtain a greater output from a given set of resources by using improved technology, or a given output can be obtained by using a smaller set of resources.
- Technological progress improves the ability to **make better use of natural resources**, for example, with the aid of power - driven farm equipment, agricultural production has increased significantly.
- The **United States, United Kingdom, France, Japan**, and other advanced industrial nations have all gained industrial strength through the application of advanced technology.
- Adoption of new production techniques, in fact, facilitates economic development.

3.1.4 *Entrepreneurship*

- Entrepreneurship entails the ability to identify new investment opportunities, as well as the willingness to take risks and invest in new and growing business units.
- The majority of the world's underdeveloped countries are poor not because of a lack of capital,lack of infrastructure, unskilled labour, or a lack of natural resources, but because of a severe lack of entrepreneurship.
- As a result, it is critical in developing countries to foster entrepreneurship by emphasising education, new research, and scientific and technological advancements.

3.1.5 *Human Resource Development*

- A good quality of population is critical in determining the level of economic growth.

- As a result, investment in human capital in the form of educational, medical, and other social schemes is highly desirable.
- Human resource development improves people's knowledge, skills, and capabilities, which increases their productivity.

3.1.6 *Population Growth*

- The **increase in labour supply** is a result of population growth, which creates a larger market for goods and services. As a result, more labour produces more output, which a larger market absorbs.
- Output, income, and employment continue to rise as a result of this process, and economic growth improves.
- However, population growth should be expected to be normal. A galloping rise will stifle the economic progress.
- Only in a sparsely populated country is population growth desirable. It is, however, unjustified in a densely populated country like India.

3.1.7 *Social Overheads*

- The provision of social overheads such as schools, colleges, technical institutions, medical colleges, hospitals, and public health facilities is another important determinant of economic growth.
- Such facilities help the **working population to be healthier, more efficient, and responsible**.
- Such people have the potential to propel their country's economy forward.

3.2 Measures Taken to Ensure Economic Growth

- Economic growth can be achieved when the rate of increase in total output exceeds the rate of increase in a country's population.
- A country's **human resources** should be sufficient in number and equipped with the necessary skills and abilities in order to achieve economic growth.
- The efficient utilisation or exploitation of **natural resources** is dependent on human resource skills and abilities, technology used, and the availability of funds. A country with a skilled and educated workforce and abundant natural resources propels its economy forward.
- **Capital formation** increases the availability of capital per worker, which raises the capital/labor ratio even further. As a result, labour productivity rises, leading to an increase in output and economic growth.
- **Technological advancement** aids in increasing productivity

with limited resources. Countries that have worked in the field of technological development grow faster than countries that have placed less emphasis on technological development. The selection of appropriate technology is also important for an economy's growth.

3.3 Conclusion

Governments in developed countries are focused on these economic factors. Less-developed countries, even those with abundant natural resources, will fall behind if they do not promote technological research and improve workers' skills and education.

4. Natural Resources

Natural resources, both renewable and non-renewable, and ecosystem services are part of a country's true wealth. They are the raw materials from which other types of capital are created. They help to increase fiscal revenue, income and reduce poverty. Natural resource-related industries provide jobs and are frequently the foundation of livelihoods for poorer communities. In this article, we will discuss more the importance of natural resources and their role in the economic growth of the nation.

4.1 Natural Resources as Economic Factor in Economic Growth

- Natural resources are the most important factor influencing an economy's development.
- Natural resources include **land area and soil quality, forest wealth, a good river system, minerals and oil resources, a favorable climate**, and so on.
- The abundance of natural resources is critical for economic growth. A country lacking in natural resources may be unable to develop rapidly.
- However, the availability of abundant natural resources is a necessary but not sufficient condition for economic growth.
- Natural resources are **unutilized, underutilized, or misutilised** in developing countries. One of the reasons for their backwardness is this only.
- Countries such as **Japan, Singapore**, and others, on the other hand, are not endowed with abundant natural resources, but they are among the world's developed nations.
- These countries have demonstrated a commitment to preserving available resources, putting forth their best efforts to manage resources, and minimizing wastage of resources.

4.2 Measures Taken to Ensure Economic Growth

- The efficient utilization or exploitation of **natural resources** is dependent on human resource skills and abilities, the technology used, and the availability of funds.
- A country with a **skilled and educated workforce** and abundant natural resources propel its economy forward.
- Natural resources have limited direct economic use in meeting human needs, but transforming them into goods and services increases their societal economic value.

- The transformation of natural resources into usable goods and services occurs as a result of the mix of productive activities carried out by different sectors of the economy, propelling the overall economy to achieve sustainable growth, which serves as the foundation for sustainable development.
- The transition from government to **governance** has emphasized the importance of involving multiple stakeholders in decision-making, knowledge creation, and natural resource and environmental policy implementation.
- **Sustaining renewable resources** is primarily concerned with preserving resource stocks and quality, as well as maintaining a quantity of consistent flows over an indefinite period of time.
- Despite the fact that non-renewable resources cannot be sustained due to their finite stocks, countries that use them can achieve sustainability by investing the revenues generated by them in other forms of capital.
- Natural resource **valuation and accounting** are essential for sound development planning. Transparent institutions and good governance are also required.
- Internalizing the environmental costs of natural resource extraction and use in resource prices is a powerful mechanism for incentivizing sustainable natural resource management and consumption.
- To maximize the value of natural resources for long-term growth and development while avoiding the resource curse, policies that formalise and codify revenue management procedures are required.

4.3 Conclusion

Natural resources, because of their fundamental importance, must be managed in a sustainable manner. Government plays a critical role in enacting policies that ensure that resources contribute to the long-term economic development of nations rather than just short-term revenue generation.

5. Capital Formation

Capital formation is a term used to describe a country's net capital accumulation over an accounting period. The term refers to capital goods additions such as equipment, tools, transportation assets, and electricity. Countries require capital goods to replace older ones used in the production of goods and services. **Production falls if a country is unable to replace capital goods as they reach the end of their useful lives.** In general, the higher an economy's capital formation, the faster it can grow its aggregate income.

5.1 Capital Formation as Economic Factor in Economic Growth

- **Capital formation** is the process by which a community's savings are channelled into investments in capital goods such as plant, equipment, and machinery, which **increases a country's productive capacity** and worker efficiency, ensuring a greater flow of goods and services in a country.
- The process of capital formation implies that a community does not spend its entire income on goods for current consumption, but **rather saves a portion** of it and uses it to produce or acquire capital goods that significantly increase the nation's productive capacity.
- More goods and services produced can lead to an increase in national income levels. A country must generate savings and investments from household savings or from government policy in order to accumulate additional capital.
- **Countries with high household savings rates can accumulate funds to produce capital goods more quickly** and a government that runs a surplus can invest the surplus.
- Capital formation refers not only to the creation of physical goods, but also to the **creation of human capital** such as education, health, skill development, etc.
- The process of capital formation occurs in three stages, which are:
    - **Creation of Savings** - It is savings that are converted into capital. Individuals generate savings by deferring their current consumption by reducing their expenditures on consumer goods.
    - **Effective Mobilization of Savings** - It is not enough to simply have more savings. Capital formation cannot occur unless people's savings are actually used (i.e., invested) to produce capital goods. However, in order to achieve this goal, the savings of various households and individuals must be effectively mobilised and made available for investment to businessmen and entrepreneurs.

- **Investment of Savings** - People's savings must be properly invested in order for a large number of honest and risk-taking entrepreneurs to produce capital goods in various productive systems such as agriculture, industry, trade, public works, transportation, communication, and improved technical know-how.

5.2 Measures Taken to Ensure Economic Growth

- **Capital formation** increases the availability of capital per worker, which raises the **capital/labor ratio** even further.
  - As a result, labour productivity rises, leading to an increase in output and economic growth.
- One fundamental aspect that must be kept in mind, is that in order to accumulate capital goods (capital formation), a portion of current consumption must be sacrificed.
- Savings are created by deferring a portion of current consumption, which are then invested to increase capital goods. As a result, both **savings** and **investments** are required for capital formation.
- Individuals' ability to save is directly related to their income and the government's taxation policy. **Higher-income combined with low taxation results in a higher rate of capital formation.**
- A public sector enterprise is an essential type of business organization. Since these are owned by the government rather than individuals, all profits can be used for capital formation by the government.
- When people are given more opportunities to mobilize their savings, they save and invest more.
  - Commercial banks, mutual funds, and other financial institutions encourage people to save more. Saving more leads to more capital formation.
- The government may stimulate capital formation by assisting potential investors in a variety of ways.
  - For example, by conducting techno-economic surveys of various lines of production, providing tax benefits to newly established production units, or granting income tax benefits to people who wish to save.
- **Commodity taxation** can also be used to boost rate of savings.
  - If items of consumption, particularly items of luxury consumption, are subjected to high rates of sales tax, the prices of the consumption goods will rise and as a result, the consumption in the country will be reduced.

    - Savings will naturally increase if income remains constant.
- Capital formation boosts investment, which has the following two effects on economic development:
    - It raises per capita income and purchasing power, which leads to more effective demand.
    - Investment leads to increased output. As a result of capital formation, economic activities in developing countries can be expanded, thereby assisting in the abolition of poverty and the attainment of economic development.
- Another important economic function of capital formation is the creation of **job opportunities** in the country. Employment is created in two stages:
    - First, when capital is produced, some workers must be employed to produce capital such as machinery, factories, dams, irrigation works, and so on.
    - Second, more men must be employed when capital is used to produce additional goods.

5.3 Conclusion

It should, however, be noted, that capital formation does not refer to an increase in monetary capital, but rather to an increase in physical capital, such as machinery, factories, transportation equipment, bridges, power projects, dams, irrigation systems, and so on. To summarise, capital formation entails the creation of physical assets.

6. Savings

Saving is the practice of reserving a portion of one's current income for future use. It refers to the accumulation of **both financial and non-financial assets**. In this regard, there are two distinct concepts in national income accounting: **net savings** and **gross savings.** Net savings are generated when disposable personal income exceeds personal expenditure, when a firm's profit is not distributed to shareholders, or when current government expenditure exceeds current government receipts. Gross savings include net savings as well as depreciation allowances for future replacement of real assets.

6.1 Savings as Economic Factor in Economic Growth

- The level of savings in a given society has a significant impact on economic growth.
- Saving, according to classical economists, is a necessary and sufficient condition for securing investment, and the interest rate is the price that equates them.
    - They believed that as savings increased, so would investment, and thus economic growth.
- **Savings generate capital formation**, which leads to technical innovation and progress, which aids in the economies of large-scale production and increases specialization, which aids in the acceleration of labor productivity, resulting in increased GDP.
- Saving leads to **more efficient use of scarce resources**, an increase in the size of national output, income, and employment, thereby solving the problems of inflation, unemployment, and balance of payment, poverty, and inequality; and freeing the economy from the burden of foreign debt, resulting in a better state of welfare.
- Individuals generate savings by deferring their current consumption by reducing their expenditures on consumer goods, but individual saving is more or less dependent on:

6.1.1 *Ability (or Power) to Save*

- This is directly related to an individual's income and the government's taxation policy.
- People with higher incomes can save more than those with lower incomes.
- Countries with high per capita income, such as the United States and some Western countries, have higher savings, whereas undeveloped or

underdeveloped countries have low per capita income and thus have lower saving power.

6.1.2 *Willingness (or Desire) to Save*

- Even if people have greater ability (or power) to save, the most important requirement is that they have a willingness or desire to save.
- However, the desire to save is influenced by a variety of personal, family, and national factors such as family affection, a desire to start a business, old age considerations, and unforeseen emergencies.
- Aside from the foregoing, higher interest rates encourage people to save.
- A reduction in income tax encourages people to save more, whereas an increase in income tax discourages people from saving.

6.1.3 *Opportunity to Save*

- The opportunity to save refers to the country's conditions of peace and security, as well as the government's favorable political philosophy to motivate people to save.
- When there is peace and security in a region or country, the trade, business, banking system, and so on will function normally, and people will be more inclined to save.
- Furthermore, certain measures and schemes implemented by the government and state agencies, such as the **P.F. (provident fund)**, have aided in instilling the habit of saving even among people with lower incomes.

6.2 Measures Taken to Ensure Economic Growth

- One fundamental aspect that must be kept in mind, is that in order to accumulate capital goods **(capital formation),** a portion of current consumption must be sacrificed.
- Savings are created by deferring a portion of current consumption, which are then invested to increase capital goods. As a result, both **savings** and **investments** are required for capital formation.
- Individuals' ability to save is directly related to their income and the government's taxation policy. Higher-income combined with low taxation results in a higher rate of capital formation.
- When people are given more opportunities to mobilize their savings, they save and invest more.
    - Commercial banks, mutual funds, and other financial institutions encourage people to save more. Saving more leads to more capital formation.

- People's ability to save is also directly affected by their **standard of living**.
  - A higher standard of living implies a higher level of income and, as a result, a higher rate of savings.
  - A lower standard of living results in lower-income and, as a result, a lower ability to save.
- **Higher interest rates mean that households will earn a higher rate of return** on their savings when they deposit them in a bank.
- Rising income levels will result in increased total savings. As households gain more disposable income and the ability to save more, they will be able to save more.
- Steps should be taken to increase and motivate small savings, for which an attractive rate of interest on savings should be offered.
  - Savings schemes such as (P.F.) provident fund, mandatory insurance, mandatory deposits, and so on should be encouraged and expanded.
- According to the **Harrod-Domar model** of economic growth, the level of savings is an important factor in determining economic growth rates.

6.3 Conclusion

- Sufficient savings can break the vicious circle of poverty in developing countries, and it is the main key to economic development as well.
- Furthermore, it is worth noting that the slow rate of development in third-world countries is commonly attributed to low levels of national savings, which limit their ability to invest in capital formation.
- This results in lower economic growth and development than other countries that contribute sufficient savings. As a result, saving is commonly regarded as the primary source of economic growth.

7. Investment

An investment is an asset or item acquired with the goal of generating income or increase in value. Growth is fuelled by **investment**. Increased private investment, whether in response to existing markets or emerging opportunities, creates new jobs, which raises local income, which leads to increased local demand for goods and services, which leads to more private sector investment and perpetuates the growth cycle.

7.1 Investment as Economic Factor in Economic Growth

- Investment is a key driver of economic growth. Investments allow for the accumulation of social capital.
- Investments generate additional revenue, which is determined by the state of the economic activity.
- During business cycles, fluctuations in output have an impact on the dynamics of investment.
- The theory and dynamics of investments are based on the **"multiplier"** principle. The multiplying property of investment resources determines their activity as an economic factor.
- The essence of it is that investment resources raise the **equilibrium level** of national output by a greater amount than the investment resources themselves.
- The fact that investment results in the accumulation of public capital, as well as the implementation of scientific and technological achievements, determines its leading role in economic development.
    - As a result, a framework for increasing countries' **manufacturing feasibility and economic growth** is established.
- The process of **expanded reprocessing** is determined by investments.
    - The process of investing or real capital formation is required for the construction of new facilities, the erection of houses, the laying of roads, and consequently providing employment as well.
- The **multiplier-accelerator concept** aids in understanding balance problems associated with the correlation between investment and savings.
- Simply having more savings isn't enough. If people's savings cannot be used (i.e., invested) to produce capital goods, capital formation cannot occur.
- However, in order to achieve this goal, the savings of various households and individuals must be effectively mobilized and made available to businessmen and entrepreneurs for investment.

7.2 Measures Taken to Ensure Economic Growth

- **Irregularity** is a feature of investment. Investments in a specific sector of the economy cannot be expected in the near future. Corrective actions, on the other hand, can be taken right away.
- Technical and technological advancements in one sector can result in rapid and intense investment in other related sectors of the economy.
    - For example, technological progress in the automobile industry always predetermines a flow of investment in the petrochemical industry.
    - The same can be said for all of the economy's interconnected sectors.
- People's savings must be properly invested in order for a large number of honest and risk-taking entrepreneurs to produce capital goods in various productive systems such as agriculture, industry, trade, public works, transportation, communication, and improved technological know-how.
- When people are given more opportunities to mobilise their savings, they save and invest more. **Commercial banks, mutual funds, and other financial institutions encourage people to save more.**
- The government may stimulate capital formation by assisting potential investors in a variety of ways.
    - For example, by **conducting techno-economic surveys of various lines of production, providing tax benefits** to newly established production units, or granting income tax benefits to people who wish to save.
- **Capital formation** boosts investment, which has the following two effects on economic development:
    - It raises per capita income and purchasing power, which leads to more effective demand.
    - **Investment leads to increased output.** As a result of capital formation, economic activities in developing countries can be expanded, thereby assisting in the abolition of poverty and the attainment of economic development.
- Many more investment and production avenues should be established and implemented by establishing and implementing schemes in agriculture, industry, transportation, banking, insurance, trade, and so on.
- Investors obtain credit from various agencies in order to expand, but the interest rates at which credit is made available to them are high,

increasing the cost of capital and resulting in low-profit margins for investors.

- A lower interest rate boosts profits and encourages investment.

- Profitable investments should be encouraged, but unprofitable investments should be avoided.

7.3 Types of Investment Models

- **Public Investment Model:** The government invests in specific goods and services through the central or state government or with the assistance of the public sector using revenue generated by it.
- **Private Investment Model:** As in India, there are times when the earnings from the public sector are insufficient to cover any shortfalls that may occur.
  - As a result, the government invites private investors to participate in some of its ventures. This investment can be either domestic or foreign.
  - **Foreign direct investment (FDI)** can help to improve existing infrastructure while also creating jobs. When it comes to external investment, this model is one of the most sought-after.
- **Public-Private Partnership Model:** Itis a long-term cooperative arrangement between two or more public and private sectors.

Apart from the above-mentioned models, there are a few other models as well, such as:

- **Domestic investment model** - It can be a public or private**-public partnership**.
- **Foreign Investment Model -** It can be mostly foreign or a mix of foreign and domestic.
- **Sector Specific Investment Models -** Investing in **Special Economic Zones** or other allied sectors.
- **Cluster Investment Models** - Investing in Manufacturing Industries is one such example.

7.4 Investment Models used in India

- **The Harrod-Domar Model** - Itis more of a **One Sector Model**, wherein the factor of economic growth is dependent on policies that increase savings and technological advances.
- **The Solow Swan Model** - Itis an extension of the Harrod-Domar Model that focuses on productivity growth.

- **Feldman–Mahalanobis Model** -This model focuses on improving the domestic consumption goods sector where capital sector goods have sufficient capacity. It later evolved into the **Nehru-Mahalanobis model**, also known as the **Four Sector Model.**
- **Rao-Manmohan Model** -Named after Narasimha Rao and Dr. Manmohan Singh, this model implemented **economic liberalization** and FDI inflows in 1999.

7.5 Conclusion

- The significant increase in investments, as well as the improvement of their quality parameters, is critical. Growth, regardless of the nature of the economy, is the ultimate goal.
- The activity of investment resources as an economic factor is determined by their multiplying property, which essentially means that investment resources raise the equilibrium level of national output by an amount greater than the investment resources.

8. Incremental Capital Output Ratio (ICOR)

Incremental Capital Output Ratio (ICOR) is the additional capital required to increase one unit of output. The incremental capital output ratio (ICOR) is a commonly used tool for explaining the relationship between the level of investment made in the economy and the subsequent increase in the **Gross Domestic Product (GDP)**. The additional unit of capital or investment required to produce an additional unit of output is denoted by ICOR.

8.1 ICOR as Economic Factor in Economic Growth

- The incremental capital-output ratio (ICOR) describes the relationship between the **amount of investment made in the economy and the resulting increase in GDP**.
- The marginal amount of investment capital required for a country or other entity to generate the next unit of production is measured by ICOR.
- **Lower ICORs are preferred** because they indicate that a country's production is more efficient.
- Some **critics** of ICOR have suggested that its use is limited because it favors developing countries that can increase infrastructure and technology use over developed countries that are operating at the highest level possible.
- Any further advancement in a developed country would have to come from more expensive research and development (R&D), whereas a developing country can improve its situation by implementing existing technology.
- ICOR can be calculated as follows:
    - ICOR = Annual Investment / Annual Increase in GDP
- **Example:** Assume that Country X has an incremental capital-output ratio (ICOR) of 10. This means that a 10 capital investments is required to generate a 1 increase in output. Furthermore, if Country X's ICOR was 12 last year, it means that Country X has become more efficient in its capital use.

8.2 Limitations - Incremental Capital Output Ratio (ICOR)

- One of its main criticisms is its inability to adapt to the new economy, which is increasingly driven by intangible assets such as design,

branding, research and development (R&D), and software, which are difficult to measure or record.

- Intangible assets, such as machinery, buildings, and computers, are more difficult to account for in investment levels and GDP.
- On-demand options, such as **software-as-a-service (SaaS),** have significantly reduced the need for fixed-asset investments.
- All of this adds up to businesses increasing their output with items that are now expensed rather than capitalised and thus considered an investment.

8.3 Conclusion

From the above example, we can see that there are factors other than savings and investment rates that could explain the slowing rate of growth in the Indian economy. Otherwise, the economy is becoming more inefficient.

9. Technological Progress

Technological progress is one of the most important factors determining the rate of **economic growth**. It is technological progress that will enable a sustained increase in output per head of population. As a result, it is the primary driver of economic growth. The technological progress is inextricably linked to the **capital formation** process. In fact, they complement each other.

Without prior capital formation, technological progress is virtually impossible. This is due to the fact that the introduction of superior or more efficient techniques necessitates the construction of new capital equipment that incorporates new technology. In other words, if new and superior technology is first embodied in new capital equipment, it can contribute to national product and growth.

9.1 Technological Progress as Economic Factor in Economic Growth

- Technological progress primarily entails research into the use of new and improved methods of production or the improvement of existing methods.
- **Natural resources** are sometimes made available as a result of technological progress. However, in general, technological progress leads to increased productivity.
- In other words, **technological advancement** increases the ability to make more effective and fruitful use of natural and other resources for increasing output.
- It is possible to obtain a greater output from a given set of resources by using improved technology, or a given output can be obtained by using a smaller set of resources.
- The discovery of new and improved methods of producing goods is referred to as technological change or progress.
- Occasionally, technological advancements result in an increase in the available supply of natural resources. However, more broadly, technological changes increase the productivity of labour, capital, and other resources.
- **Total factor productivity** refers to the productivity of all factors' combined inputs. As a result, technological progress implies an increase in total factor productivity.
- As technology advances, it is possible to produce more output with the same resources or the same amount of product with fewer resources.
- **Technological change**, or more precisely technological progress, is

a change in the manufacturing process that results in a higher output per unit of labour.

- **Technological advancement** causes a shift in the production function, which incorporates all known techniques.
- Changes in technology must be distinguished from changes in technique.
    - While technological change refers to advances in knowledge that result in improved methods of production, technique change refers to the use of a different but previously known method of production.

9.2 Measures Taken to Ensure Economic Growth

- **Technological advancement** aids in increasing productivity with limited resources.
- Countries that have worked in the field of technological development grow faster than countries that have placed less emphasis on technological development. The selection of appropriate technology is also important for an economy's growth.
- Technological progress improves the ability to make better use of natural resources, for example, with the aid of power-driven farm equipment, agricultural production has increased significantly.
- The United States, United Kingdom, France, Japan, and other advanced industrial nations have all gained industrial strength through the application of advanced technology.
- Adoption of new production techniques, in fact, facilitates economic development.
- Increased production can be achieved by either using more resources or by realizing higher productivity by more efficiently utilizing labor, capital, and land resources.
- Technological progress can aid in the discovery of new natural resources in the country, thereby increasing the country's productive potential.
- Technological advancements also boost the productivity of available resources.
- Technological advancement increases worker productivity by providing better machines, methods, and skills.

9.3 Conclusion

- In today's technological age, the desire for developing countries to make rapid technological progress in order to catch up with today's developed countries is obsessive.

- Intensive efforts are being made to implement improved technology in agriculture, industries, health, sanitation, and education, as well as in all other aspects of human life.
- Indeed, newly emerging nations have come to regard technology as a pillar of national autonomy as well as a status symbol in the international community.

10. Entrepreneurship

Entrepreneurship is defined as the ability and willingness to create, organise, and run a business, including all of its risks, in order to make a profit. A high level of **entrepreneurship** contributes to **economic growth** and **job creation**. Entrepreneurs contribute to a region's economic capacity and dynamism. Regions can benefit from new business development if their economic, cultural, and regulatory environments are conducive to entrepreneurship.

Entrepreneurship and **entrepreneurs** are regarded as important economic growth drivers because they contribute to the creation of new jobs and employment opportunities, the emergence of new innovations, and the stimulation of competition and competitiveness. It is an economic growth factor important for UPSC IAS Economy subject.

10.1 Entrepreneurship as Economic Factor in Economic Growth

- Entrepreneurship is important for a variety of reasons, including promoting **social change** and **fostering innovation**.
- Entrepreneurs are frequently regarded as national assets to be nurtured, motivated, and rewarded to the greatest extent possible.
- Indeed, some of the most developed countries, such as the United States, are world leaders as a **result of their forward-thinking innovation, research, and entrepreneurial individuals**.
- Great entrepreneurs have the power to transform the way we live and work on a local and national scale.
- If they are successful, their innovations may raise living standards and, in addition to creating wealth through entrepreneurial ventures, they will also create jobs and contribute to a growing economy.
- Entrepreneurship entails the ability to identify new investment opportunities, as well as the willingness to take risks and invest in new and growing business units.
- The majority of the world's underdeveloped countries are poor not because of a lack of capital, lack of infrastructure, unskilled labour, or a lack of natural resources, but because of a **severe lack of entrepreneurshi**p.
- As a result, it is critical in developing countries to foster entrepreneurship by emphasising education, new research, and scientific and technological advancements.
- The significance of entrepreneurship cannot be underestimated.

10.2 Measures Taken to Ensure Economic Growth

- **Entrepreneurs' new products and services** can have a cascading effect, stimulating related businesses or sectors that need to support the new venture, thereby advancing economic development.
    - For example, during the 1990s, the **IT industry in India** was made up offew information technology firms. The industry grew quickly, and it benefited many other industries.
    - Businesses in related industries thrived, such as call centre operations, network maintenance companies, and hardware providers.
    - Education and training institutions bred a new generation of IT workers who were offered better, higher-paying jobs.
- Entrepreneurial ventures contribute to the creation of new wealth.
    - Existing businesses may be restricted to existing markets and may reach an income ceiling.
    - Entrepreneurs' new and improved products, services, or technology enable the development of new markets and the creation of new wealth.
- Furthermore, **increased employment and higher earnings** contribute to higher national income through increased tax revenue and government spending.
    - The government can use this revenue to invest in other struggling sectors and human capital.
- Entrepreneurs break away from tradition by providing one-of-a-kind goods and services, reducing reliance on obsolete systems and technologies. This can lead to higher quality of life, higher morale, and greater economic freedom.
    - For example, smartphones and apps have transformed work and play around the world. Smartphones are not limited to wealthy countries or people; more than 5 billion people worldwide own mobile devices.
    - As the smartphone market expands, technological entrepreneurship has the potential to have a profound and long-term impact on the world.
- Furthermore, as a result of **technological globalisation**, entrepreneurs in developing countries now have access to the same tools as their counterparts in developed countries.
    - They also benefit from lower living costs, allowing a young

entrepreneur from a developing country to compete with a multimillion-dollar existing product from a developed country.

- Entrepreneurs frequently support the endeavours of others who share their vision. They also invest in community projects and donate money to local charities. This allows for further development outside of their own ventures.
    - Some well-known entrepreneurs, such as **Bill Gates**, have used their wealth to support worthy causes ranging from education to public health.
- The characteristics that make one an entrepreneur can also be the characteristics that motivate entrepreneurs to pay it forward through philanthropy later in life.

10.3 Criticism - Entrepreneurship

- Regulation is critical in fostering entrepreneurship. **Unregulated entrepreneurship** may result in undesirable social outcomes such as unfair market practises, widespread corruption, and criminal activity.
- Paradoxically, a large number of entrepreneurs may result in **fierce competition and the loss of career options** for individuals.
- When there are too many entrepreneurs, aspirations tend to rise and because of the variability of success in entrepreneurial ventures, having too many entrepreneurs may result in income inequality, making citizens unhappier.

10.4 Conclusion

For policymakers and business owners, understanding the relationship between entrepreneurship and economic development is critical. Understanding the advantages and disadvantages of entrepreneurship allows for a more balanced approach to fostering entrepreneurship, which can have a positive economic and societal impact.

11. Human Resources Development

Human Resources Development or **Human capital** refers to workers' **knowledge, skill sets, and experience** in an economy. **Human Resources Development** and **economic growth** are strongly linked. Human capital influences economic growth and can aid in the development of an economy by broadening its people's knowledge and skills.

Since a knowledgeable workforce can lead to **increased productivity**, the skills have economic value. Human capital is the recognition that not everyone possesses the same skill sets or knowledge. Investing in people's education can also improve work quality. Human Resources Development is a very important topic for the UPSC IAS exam Economy subject.

11.1 Human Resources Development as Economic Factor in Economic Growth

- A good quality of population is critical in determining the level of economic growth.
- As a result, investment in human capital in the form of educational, medical, and other social schemes is highly desirable.
- Human resource development improves people's knowledge, skills, and capabilities, which drives **innovation, productivity gains**, and economic growth.
- Since workers can move from place to place, regions must improve their **liveability, or quality of life, in order to retain existing talent** and attract new talent.
- **Quality-of-life factors** are increasingly influencing economic development as the mix of skills and occupations becomes more important to the economic well-being of regions.
- Since investment tends to boost productivity, human capital is positively correlated with economic growth.
- The amount of skilled labour required is determined by the level of economic growth driven by **consumer spending** and **business investment**.
- Investing in workers has a proven track record of improving employment conditions in economies around the world.

11.2 Measures Taken to Ensure Economic Growth

- A country's **human resources** should be sufficient in number and equipped with the necessary skills and abilities in order to achieve economic growth.

- Governments' role is critical in expanding a country's population's skill sets and education levels.
    - Some governments are actively involved in improving human capital by providing free higher education to citizens.
    - These governments recognise that the knowledge gained through education contributes to the development of an economy and the acceleration of economic growth.
- Workers with **more education or better skills tend to earn more**, which boosts economic growth through increased consumer spending.
- Businesses also invest in human capital in order to increase profits and productivity.
- The process of educating a workforce is a type of investment, but it is an investment in human capital rather than capital investment such as equipment.

11.3 Conclusion

Investing in workers has a proven track record of improving employment conditions in economies around the world. When the labour market improves, consumer spending rises, resulting in increased revenue for businesses and additional business investment. As a result, employment is a key indicator or metric for forecasting GDP growth.

Chapter 8: Human Development

1. Population Growth

The term "**Population Growth**" refers to the increase or decrease in the size of a population. **Population growth** is an important factor in overall **economic growth** and, in some cases, may even contribute to **higher per capita output growth**. Rapid population growth in low-income countries is likely to be detrimental in the short and medium-term because it results in a large number of dependent children.

The population is a **labor force resource**. The labor force will grow in proportion to the size of the population. Labour alone is incapable of producing anything. A labor force is a productive asset for a country if other resources required for production are also available in sufficient quantity. If other resources are in short supply, a large labor force may become an impediment to faster economic growth.

1.1 Population Growth as Economic Factor in Economic Growth

- The **increase in labor supply** is a result of population growth, which creates a larger market for goods and services. As a result, more labour produces more output, which a larger market absorbs.
- Output, income, and employment continue to rise as a result of this process, and economic growth improves.
- However, population growth should be expected to be normal. **A galloping rise will stifle the economic progress.**
- Only in a sparsely populated country is population growth desirable. It is, however, unjustified in a densely populated country like India.

1.2 Measures Taken to Ensure Economic Growth

- An increasing population means a greater number of working people who can participate actively in the process of economic growth and development. Population growth leads to an **increase in total output**.
- A growing population means a larger market for most goods and services, and we all know that the size of the market limits the **division of labor**.
- A potentially **expanding market may encourage entrepreneurs**

to invest in capital goods and machinery at an increasing rate. As a result, business activity will increase. As a result, more income and jobs will be created.

- Furthermore, it will serve as a market for the products of efficient, **large-scale mass-production industries.** The net effect may be beneficial to the country.
- Higher population growth rates would clearly lead to higher economic growth rates if population growth and per capita GDP growth were completely independent.
- On the other hand, if population growth affects per capita output growth, then the higher population growth rates will contribute to either higher or lower overall economic growth, depending on the nature of its effects on per capita GDP.
- Although the world's population is larger than ever, a large proportion of humanity's standard of living is also much higher than at any time in recorded human history.
    - Similarly, looking ahead, the potential for economic growth appears to be far greater than the potential for population growth.
    - For example, new strains of wheat, rice, and other foods, for example, have been discovered that have the potential to increase yields by two to five times in a short period of time.
    - In comparison, the world population would only double in about 35 years.
    - Of course, utilizing this potential would necessitate significant social changes, but the potential exists and is enormous.

1.3 Conclusion

There exists a conflicting role between population growth and economic development. It has the potential to be both a stimulant and an impediment to growth and development. Such opposing roles imply that the relationship between population and economic development is intricate, complex, and fascinating.

2. Non-Economic Factors Affecting Economic Growth

Non-economic factors such as **socioeconomic, cultural, psychological, and political factors** are as important as economic factors in economic development. These factors not only influence the nature of government planning strategies, but also how these plans are implemented. We will look at some of the most important non-economic factors that influence an economy's growth.

2.1 Non-Economic Factors

Political Factors

- **Political stability** and strong administration are critical to modern economic growth.
- A stable, strong, and efficient government, honest administration, transparent policies, and their efficient implementation foster investor confidence and attract domestic and foreign capital, resulting in faster economic development.

Social and Psychological Factors

- Social factors include **social attitudes, social values, and social institutions**, which change as education expands and cultures shift from one society to the next.
- Modern ideology, values, and attitudes result in new discoveries and innovations, as well as the rise of new entrepreneurs.
- Outdated social customs limit occupational and geographical mobility, posing a barrier to economic development.

Education

- It is now widely acknowledged that education is the primary means of development. Greater progress has been made in countries where education is widely available.
- Education is important in human resource development because it increases labour efficiency and removes mental barriers to new ideas and knowledge, which contributes to economic development.

Desire for Material Betterment

- The desire for material advancement is a necessary prerequisite for economic development.

- Societies that place focus on self-satisfaction, self-denial, and faith in fate, limit risk and enterprise, causing the economy to stagnate.

2.2 Measures Taken to Ensure Economic Growth

- The **twelfth five-year plan (2007-12)** combines economic growth with inclusion, with the goal of faster, more sustainable, and more inclusive growth.
- The rate of economic growth has increased over time as a result of radical reforms implemented in the 1990s.
- Participation in **development programmes** on a large scale is required to accelerate the growth process.
- Administrative machinery's orientation shifts from regulator to facilitator.
- The **government's direct intervention** can now be seen in making available the necessary social investment, establishing independent regulatory institutional mechanisms, drafting incentive-based policy, etc.
- **Welfare schemes** are implemented in a variety of ways, including food subsidies, public distribution of essential commodities, nutrition programmes, and financial assistance through microfinance.
- The central and state governments have developed **customised welfare schemes** for various types of beneficiaries (women, children, BPL, etc.).
    - The **Integrated Child Development Scheme** is a type of welfare programme that benefits both children and women.
- The government is **encouraging public participation** in a variety of ways, and the average citizen must respond positively and pro-actively.
- **Promotion of SHGs** is a typical example of public participation. The government can provide a supporting platform for citizen-centric services, but the responsibility to deliver remains with the common man.
- Support and promotion programmes for SHGs have produced positive results in South Indian states, particularly Kerala and Andhra Pradesh.
    - The **Kudumbasree programme**, which is supported by the **Kerala government**, has been successful in empowering women and reducing poverty.
    - **Andhra Pradesh's 'Indira Kranti Pathakam'** initiative is making good progress in social mobilisation, gender empowerment, and rural poverty reduction.
- **Policy intervention** occurs at both the **micro and macro levels**.

- Improving fiscal discipline, trade liberalisation, promoting Foreign Direct Investment, privatisation, deregulation, tax reforms, labour laws, social safety nets, public expenditure, and so on are **important macro policy measures.**
- Reducing income inequality, improving public/social infrastructure, healthcare, education, access to essential services, accountability and transparency, women empowerment, the role of civil society organisations, and so on are **important micro policy measures.**

2.3 Conclusion

Development is not a mechanical procedure. The rate of economic growth in any country is heavily influenced by people's desire to progress. If a country's level of consciousness is low and the general populace accepts poverty as its fate, there is little hope for development.

3. Economic Development

Economic development can be defined as the process of improving a nation's, community's, or region's **economic well-being** and **quality of life** in accordance with predetermined goals and objectives. Economic development is a result of a combination of market productivity and national welfare values. Understanding economic development is very important for UPSC IAS Exam Economy Subject.

In this article, let us see the meaning of economic development, its features, and ways to measure economic development.

3.1 Economic Development

- **Economic development** is defined as a sustained improvement in society's material well-being.
- Economic development encompasses a broader range of concepts than **economic growth**.
- Aside from national income growth, it includes **social, cultural, political, and economic changes** that contribute to material progress.
- It includes changes in resource supplies, capital formation rates, population size and composition, technology, skills, and efficiency, as well as institutional and organizational structure.
- These changes contribute to the larger goals of ensuring more equitable income distribution, increased employment, and poverty alleviation.
- It is a long chain of interconnected changes in fundamental supply factors and demand structure that leads to an increase in a country's net national product in the long run.

3.2 Features

- Economic development entails **changes in income, savings, and investment**, as well as gradual changes in the country's socio-economic structure (institutional and technological changes).
- Development related to **human capital growth**, a reduction in inequality numbers, and structural changes that improve the population's quality of life.
- To assess economic development, qualitative indicators such as the HDI **(Human Development Index),** gender-related indexes, **Human Poverty Index (HPI)**, infant mortality, literacy rate, and so on are used.
- Economic development results in **both qualitative and quantitative changes** in the economy.

- Economic development reflects progress in a country's **quality of life**.

3.3 Factors Affecting Economic Development

1. Infrastructural Development

- Infrastructure development improves people's quality of life.
- As a result, an increase in the rate of infrastructural development will result in a nation's economic development.

2. Education

- Improving literacy and technical knowledge will result in a better understanding of how to use various pieces of equipment.
- This will increase labor productivity and, as a result, a country's economic development.

3. Increase in capital formation

- An increase in capital formation will result in more productive output in an economy, which will have a positive impact on economic development.

3.4 Measurement

1. National Income and Per Capita Income

- This is the **traditional method** of assessing economic development.
- The World Bank employs the concept of per-capita **Gross National Income (GNI)** as a means of comparing and categorizing countries based on their economic development stage.
- The **World Bank** divides the world's economies into four income categories:
  - Low-income – Less than $1036
  - Lower-middle income – $1036 - $4045
  - Upper-middle – $4046 - $12535
  - High income – More than $12535
- According to this classification, **India,** with a per-capita GNI of US $ 1900 (as of 2020 figures), belongs to the **Lower-middle Income countries**.

2. Purchasing Power Parity (PPP)

- **Gustav Casell,** an economist, proposed the **PPP approach in 1918**.
- The concept is based on the **law of one price**, which states that in the

absence of trade and non-trade barriers, identical goods in different countries will have the same price when expressed in the same currency.

- The PPP is defined as the number of units of a country's currency required to purchase the same amount of goods and services in the domestic market as one dollar would in the US.
- For example, if we have to spend ₹30 to buy the same amount of goods and services as are purchased in spending $1 in United States, then the exchange rate in the PPP approach is $1 = ₹30.

3. Green GDP

- **Green GDP is a term that refers to GDP after accounting for environmental degradations.**
- Green GDP is an attempt to measure an economy's growth **by deducting the costs of environmental damage and ecological degradation from GDP**.
- **The concept was first introduced as part of a System of National Accounts (SNA).**
- The System of National Accounts (SNA) is an accounting framework for measuring an economy's economic activities of production, consumption, and wealth accumulation over time.
- When data on the economy's use of the natural environment is integrated into the national accounting system, it is referred to as **green national accounts** or **environmental accounting**.
- The environmental accounting process consists of three steps: physical accounting, monetary valuation, and integration with national income/ wealth accounts.
- **Physical accounting** determines the state, types, and extent (qualitative and quantitative) of resources in spatial and temporal terms.
- **Monetary valuation** is used to determine the tangible and intangible components of a business.
- Following that, the net change in natural resources in monetary terms is incorporated into the Gross Domestic Product to arrive at the Green GDP value.

4. Human Development Index (HDI)

- The **Human Development Index (HDI)** is a statistical tool used to assess a country's overall performance in social and economic dimensions.
- The social and economic dimensions of a country are determined by people's health, educational attainment, and standard of living.

- In 1990, **Pakistani economist Mahbub ul Haq developed the HDI**, which was later used by the **United Nations Development Program (UNDP)** to assess the country's development.
- The index is calculated by combining **four major indicators**:
  - life expectancy for health,
  - expected years of schooling,
  - mean years of schooling for education, and
  - Gross National Income per capita for a standard of living.
- Currently, **India ranks 131 out of 189 countries** in the United Nations' Human Development Index.

3.5 Importance

- Just as we need to make conscious efforts to increase our income and growth, we also need to make conscious efforts to increase our economic development and higher economic development.
- **Development has not been possible anywhere in the world without a conscious public policy.**
- Similarly, we can say that there can be **no development without growth**.
- If economic growth is used properly for development, it will re-accelerate growth and eventually bring a larger population into the development arena.
- Similarly, high growth with low development leads to a decline in growth.
- Economic development is a more relevant indicator of progress and quality of life in developing countries such as India, where inequality in wealth distribution is prevalent.

3.6 Conclusion

- Economic development is a subset of economic growth but encompasses a broader scope than economic growth.
- Economic development employs a variety of indicators to assess the state of an economy as a whole.
- Each community has its own set of opportunities, challenges, and priorities. People who live and work in the community must be included in the economic development planning.

4. Indicators of Economic Development

Indicators of Economic Development are one way to assess a country's development progress. These economic indicators and associated parameters provide **critical data points for making informed decisions**. There are numerous indicators used, and it is beneficial to understand what the terms mean. **GDP, GNP, national debt, trade balance, credit rating, and wealth distribution** are some of the most common economic indicators.

4.1 Types of Economic Indicators

- **Leading indicators** predict economic changes in the future. They are extremely useful for forecasting short-term economic developments because they typically change before the economy.
- **Lagging indicators** typically appear after the economy has changed. They're most useful when used to confirm specific patterns. Economic predictions can be made based on patterns, but lagging indicators cannot be used to predict economic change directly.
- **Coincident indicators** provide useful information about the current state of the economy in a specific area because they occur at the same time as the changes they indicate.

4.2 Important Indicators of Economic Development

1. Gross Domestic Product (GDP)

- **Gross Domestic Product (GDP) is a lagging indicator.**
- GDP is a measure of a **country's economic activity**. It is calculated by totaling a country's annual output of goods and services.
- This metric more accurately reflects the income paid to production factors.
- It excludes aspects of the good life, such as some recreational activities. It also excludes economically valuable but unpaid activities such as parents teaching their children to read.
- However, it does include some activities that degrade the quality of life, such as those that harm the environment.

2. Gross National Product (GNP)

- GNP is calculated by adding to GDP the income earned by residents from **foreign investments**, less the income sent home by foreigners living in the country.

3. National Debt

- The **total outstanding borrowing** of a country's government is referred to as its **national debt** (usually including national and local government).
- Although public debt may have economic benefits, it is frequently described as a burden.
- Debt incurred by one generation can certainly become a heavy burden for subsequent generations, especially if the money borrowed is not wisely invested.

4. Balance of Trade

- Balance of Trade is a **lagging indicator.**
- The **balance of trade** (or net exports, sometimes abbreviated as **NX**) is the difference in the monetary value of an economy's exports and imports of output over a given time period.
- It refers to the relationship between a country's imports and exports.
- If a country's trade balance is positive or favorable, it is referred to as a **trade surplus**; if the balance is negative or unfavorable, it is referred to as a **trade deficit** or, a **trade gap**.
- A trade surplus is generally desirable because it indicates that more money is coming into the country than is leaving.
- A trade deficit indicates that more money is leaving the country than is coming in. **Trade deficits can result in substantial domestic debt.**
- In the long run, a trade deficit can lead to a depreciation of the local currency because it causes significant debt. The local currency's credibility will suffer as debt levels rise.
- However, if a country's trade surplus is too large, it may not be taking advantage of the opportunity to buy products from other countries.
- In a global economy, nations specialize in manufacturing specific products while purchasing goods produced more efficiently by other nations at a lower cost.

5. Credit Rating

- **A credit rating assesses an individual's, corporations', or even a country's creditworthiness.**
- It is a credit bureau's assessment of a borrower's overall credit history.
- A credit rating is an evaluation of a potential borrower's **ability to repay the debt** that is prepared by a credit bureau at the request of the lender.
- Credit ratings are **based on financial history as well as current assets and liabilities.**

- A credit rating typically informs a lender or investor about the likelihood of a subject's ability to repay a loan.
- Credit ratings, nowadays, are also used to adjust insurance premiums, determine employment eligibility, and determine the amount of a utility or leasing deposit.
- A poor credit rating indicates a high risk of loan default, which leads to high-interest rates or the creditor's refusal to give loan.

6. Distribution of Wealth

- A comparison of the wealth of various members or groups in a society is referred to as the **distribution of wealth**.
- It differs from income distribution in that it considers the distribution of ownership of assets in society rather than the current income of its members.
- Wealth is defined as a person's net worth, which is expressed as:
  - Wealth = Assets - Liabilities
- The terms **'wealth'** and **'income'** are often confused and used interchangeably. These two terms refer to two distinct but related concepts.
- An individual's wealth consists of the items of economic value that he or she owns, whereas income is an inflow of items of economic value.

7. Inflation

- Inflation is defined as the annual increase in the prices of goods, services, and wages.
- High inflation is a bad sign, indicating that the government has lost control of the economy.

8. Demographics

- Demographics is the study of population growth and structure. It compares birth and death rates, as well as life expectancy and urban-rural ratios.
- Many LEDCs have a younger, faster-growing population than MEDCs, with more people living in rural areas than in cities.

9. Stock Market

- The stock market is a **leading indicator**. It's also the indicator that most people look to first, despite the fact that it's not the most important.
- Stock prices are influenced in part by what companies are expected to

earn. If the earnings estimate for companies is correct, the stock market can forecast the direction of the economy.

- A **down market**, for example, may indicate that overall company earnings are expected to fall and that the economy is on the verge of a recession.
- On the other hand, an **upmarket** could imply that earnings estimates are rising and, as a result, the economy as a whole is doing well.

10. Unemployment

- **Unemployment is a lagging indicator.**
- The number of jobs created or lost in a given month is an indicator of economic health that can have a significant impact on the securities market.
- When more businesses hire, it indicates that the businesses are doing well. More hiring may also lead to predictions that more people will have more money to spend because more people are employed.
- Unemployment rates that arise unexpectedly or fall less than expected can sometimes be associated with a drop in stock prices because it may imply that employers cannot afford to hire as many people.

11. Consumer Price Index (CPI)

- The Consumer Price Index (CPI) is a **lagging indicator**.
- The CPI measures changes in the prices paid by urban consumers for goods and services over a given month. It is essentially a measure of changes in the cost of living.
- It provides a measure of inflation in terms of purchasing those goods and services.

12. Interest Rates

- Interest rates are a **lagging indicator**.
- Borrowers are more hesitant to take out loans when interest rates rise. This discourages consumers from taking on debt and businesses from expanding, potentially slowing GDP growth.
- If interest rates are too low, this can increase demand for money and increase the likelihood of inflation.
- Inflationary pressures can distort the economy and the value of its currency.
- **Current interest rates reflect the current state of the economy** and can also predict where the economy will go in the future.

13. Currency Strength

- The strength of the currency is a **lagging indicator**.
- When a country's currency is strong, its purchasing and selling power with other countries increases.
- A country with a strong currency can import goods at lower prices and sell them at higher foreign exchange rates.
- When a **country's currency is weaker, it can attract more tourists** and encourage other countries to buy its goods because they are cheaper.

14. Manufacturing Activity

- Manufacturing is a **leading indicator** of the economy.
- Orders for **durable goods** are a leading indicator of manufacturing activity.
- Durable goods are consumer products that are typically not replaced for at least a few years, such as refrigerators and automobiles.
- An increase in durable goods orders is generally regarded as a sign of economic health, whereas a decrease may indicate economic trouble.

15. Income and Wages

- Income and wages are **lagging indicators**.
- Earnings should rise to keep up with the average cost of living when the economy is performing well.
- **When incomes fall in relation to the average cost of living, it indicates that employers are either laying off workers, lowering pay rates, or reducing employee hours.**
- Income declines can also indicate an environment in which investments are underperforming.

4.3 Conclusion

An economic indicator is only useful if it is correctly interpreted. Indicators provide signs from time to time, but the best investors combine multiple economic indicators to gain insight into patterns and verifications within multiple sets of data.

5. Human Development

Human development can be defined as the process of improving people's well-being through increasing their freedoms and possibilities. Human development focuses on enhancing people's lives rather than expecting that increased economic growth will result in increased happiness for all. The UPSC Indian Economic Syllabus includes Human Development which is described in this article.

5.1 Human Development

- Human development is a process of improving people's choices, such as **education, health care, income, and empowerment,** and it encompasses the complete range of human choices, from a healthy physical environment to economic, social, and political freedom.
- As a result, the most important part of human progress is expanding people's choices.
- People's choices may include a variety of issues, but **living a long and healthy life, being educated, and having access to resources necessary** for a decent standard of living, such as political freedom, guaranteed human rights, and personal self-respect, are all considered **non-negotiable aspects of human development.**

5.2 The Four Pillars

1. Productivity
2. Equity
3. Sustainability
4. Empowerment

Productivity

- It refers to **human labour productivity** or productivity in terms of human effort in this context.
- People's capacities must be continually enhanced in order to maintain high levels of production. People are, in the end, a country's most valuable resource.
- As a result, efforts to **improve their knowledge** or provide **better health facilities** result in increased productivity.

Equity

- It refers to ensuring that all people have **access to the same opportunities**.

- People must have equal access to opportunities **regardless of their gender, ethnicity, income, social position, or, in India's case, caste**. However, this is not always the case, and it occurs in practically every community.
- For instance — It's fascinating to examine which demographic accounts for the majority of school dropouts in any country. This should lead to a better understanding of why such conduct occurs.
    - In India, a substantial number of women and people from economically and socially disadvantaged backgrounds drop out of school.
    - This demonstrates how a lack of access to knowledge limits the options available to these populations.

Sustainability

- It refers to the **availability of opportunities remaining constant**.
- To achieve long-term human growth, each generation must have equal **access to decision-making possibilities**.
- Sustainable development necessitates the utilization of all environmental, financial, and human resources with the future in mind.
- If any of these resources are misused, subsequent generations will have fewer chances.
- The necessity of sending girls to school is an excellent example.
    - If a community does not emphasize the value of sending girls to school, these young ladies will miss out on many chances.
    - Their professional options will be limited, which will have an impact on other elements of their lives.
- As a result, it is critical for each generation to ensure that future generations have access to options and opportunities.

Empowerment

- To have the **ability to make decisions**. Increased freedom and capability to select are the sources of such power.
- To empower individuals, **good governance** and **people-centered policies** are essential.
- Empowerment of socially and economically marginalised populations is particularly important.

5.3 Approaches to Human Development

- Basic needs

- Income
- Capability
- Welfare

Basic Needs Approach

- The **International Labour Organization (ILO)** was the first to advocate this strategy.
- Six fundamental needs were identified: **health, education, food, water supply, sanitation, and shelter.**
- The issue of individual choice is neglected, and the focus is instead on meeting the basic requirements of specific groups.

Income Approach

- This approach is one of the oldest approaches to human development.
- Income is thought to be linked to human growth. The concept is that an individual's amount of freedom is reflected in his or her income.
- The more one's income, the higher one's level of human development.

Capability Approach

- This approach is associated with **Prof. Amartya Sen**.
- The key to enhancing human development is to improve human capacities in the areas of health, education, and resource access.

Welfare Approach

- Human beings are seen as beneficiaries or goals of all developmental efforts in this paradigm, which advocates for more government spending on education, health, and basic necessities.
- People are merely passive recipients, not active players.
- The government is exclusively accountable for boosting human development levels through maximising welfare spending.

5.4 Measuring Human Development

Human Development Index (HDI)

- It is a **statistical tool** used to quantify a **country's overall accomplishment** in its **social and economic dimensions**, and it is published annually by the **United Nations Development Programme (UNDP).**
- The health of people, their level of education, and their style of life determine a country's social and economic characteristics.

- The economist **Mahbub Ul Haq** developed a human development method that is based on Nobel Laureate Amartya Sen's work on human capacities.
- Its goal was to "move development economics away from national income accounting and toward people-centered policy."
- HDI is broken down into **four tiers**–
  - Very high human development
  - High human development
  - Medium human development
  - Low human development
- HDI measures the average success of a country in **three basic dimensions** of human development:
  - A long and healthy life
  - Access to knowledge
  - A decent standard of living

5.5 Conclusion

- Human development tends to offer people more freedom and opportunities to live their lives as they choose. People must be able to enhance and utilise their strengths in order to achieve this.
- Human development is a multidimensional concept. The key elements of human development are represented by the three variables used by the UN in the Human Development Index (HDI).
- A long and healthy life, knowledge, and a fair level of living are the three key dimensions.
- When these important dimensions are provided initially, the prospects for advancement and improvement in other aspects of human life will expand as well.

6. Human Development Index (HDI)

Human development index (HDI) is a **statistical tool** used to measure a country's overall accomplishment in its **social and economic dimensions**, and it is published by the **United Nations Development Programme (UNDP)**. The health of people, their level of education, and their style of life determine a country's social and economic dimensions. The UPSC Indian Economic Syllabus includes the Human Development Index which is described in this article.

6.1 What is the Human Development Index (HDI)?

- The **Human Development Index (HDI)** measures the level and changes in quality of life by combining indicators of life expectancy, education or access to knowledge, and income or standard of living.
- **Mahbub ul Haq and Amartya Sen**, two renowned economists from Pakistan and India, created the measure.
- It was created as a **complement to the gross domestic product** because it emphasises the importance of human development in the growth process.
- India appears to have done a fantastic job of multiplying its GDP many times over, but development on the HDI front has been disappointing.
- India's HDI score has risen at an annual average rate of 1.42 percent over the last three decades, according to HDI data.
- As a result, if India is to achieve its goal of becoming a superpower, it must invest to alleviate the weight of social and economic disadvantage on the poor.

6.2 Dimensions of Human Development Index

Long and Healthy Life

- **Life expectancy at birth** is used to calculate the dimension of a long and healthy life.
- The life expectancy at birth is a statistical measure of how long an average person is expected to live based on demographic factors such as birth year and current age.

Education

- The HDI's second dimension is education. The **expected years of schooling** and the **mean years of schooling** are the education indicators.
- According to the United Nations, the average maximum number of

years of schooling is **18 years**, while the mean maximum number of years of schooling is **15 years**.

Standard of Living

- The **gross national income (GNI) per capita** is commonly used to assess the standard of living.
- The GNP measures the total domestic and foreign output generated by a country's residents.

Progress Made by India

- India's **gross national income per capita has more than doubled** since 2005, according to the UNDP's HDR Report 2019, and the number of **"multidimensionally poor" individuals has decreased** by more than 271 million since 2005-06.
- **Inequalities in "basic areas"** of human development have **also decreased**.
- In terms of educational attainment, historically marginalised groups, for example, are catching up to the rest of the population.

6.3 Reasons for India's Underperformance on HDI

India is ranked 131st in the 2020 HDI, with a per capita income of $6,681, a notch lower than its 2019 ranking of 129th. Deep-rooted societal and economic disadvantages are to account for a poor ranking for an economy that is in the world's top six in terms of size. The following causes can be attributed to India's poor HDI performance:

- **Increasing Income Inequalities:** Income disparities amplify failures on other HDI human development indices. In countries with substantial income disparity, intergenerational income mobility is lower.
- **Gender Inequality:** According to statistics, female per capita income in India is just 21.8 percent of that of males, although it is more than twice in other emerging countries, at 49 percent.
- **Cumulative Impact**: These elements have a long-term impact that spans generations. This intergenerational loop deprives people at the bottom of the pyramid of opportunity.

6.4 Conclusion

India's HDI scores can be significantly improved if a politically committed government implements inclusive policies to improve public health, education, and nutrition, as well as to eliminate gender discrimination and usher in a more equal society.

7. Classification of Countries

The World Bank classifies countries based on the Gross National Income (GNI) per Capita data. Based on the GNI per capita data the countries are classified as lower-income, lower-middle-income, upper-middle-income, and high-income countries. This classification generally overlaps with the terminology of Developed, Developing/Emerging, Underdeveloped, and Least developed countries. In this article, we will see the general characteristics of the different classifications of countries.

7.1 Classification of Countries - An Introduction

- Countries are classified as developed or developing based on their **gross domestic product (GDP)** or **gross national income (GNI) per capita**, level of industrialization, the general standard of living, and technological infrastructure, among other factors.
- The United Nations (UN) defines a country's development status as a reflection of its **"basic economic country conditions**."
- The **human development index (HDI) is a metric developed by the United Nations that is used to assess countries' social and economic development** levels based on life expectancy, educational attainment, and income, and it serves as an alternative means of determining a country's development status.
- For instance, many western countries such as the USA, UK, France, Germany, and Sweden are considered developed countries, and few countries in the African continent like Ethiopia, Gambia, Guinea, and Eritrea are classified as the Least Developed Countries.

7.2 Developed Countries

- A developed country, also known as an **industrialized country**, has a mature and sophisticated economy, as measured by GDP and/or average income per resident.
- Developed countries have **sophisticated technological infrastructure** as well as diverse industrial and service sectors. Their citizens usually have **access to good health care and higher education.**
- Because there are so many variables to consider, determining which countries are developed can be difficult.
- Developed countries have **more advanced post-industrial economies**, which mean that the **service sector generates more wealth than the industrial sector.**

- They are contrasted with developing countries that are **either industrializing or are pre-industrial** and almost entirely agrarian, some of which may fall into the category of Least Developed Countries.

7.3 Characteristics of Developed Countries

- **Has a high per capita income:** Developed countries have high per capita incomes year after year. **The country's economic value will be increased by having a high per capita income.** As a result, the level of poverty can be reduced.
- **Security is ensured:** When compared to developing countries, developed countries have a **higher level of security.** This is also a result of advanced technology in developed countries. **Security facilities and weapon technology** are also improving as a result of advanced technology.
- **Guaranteed Health:** A developed country's **health is guaranteed in addition to its security.** This is distinguished by a wide range of **adequate health facilities, such as hospitals, as well as trained and dependable medical personnel.**
    - As a result, **mortality rates** in developed countries can be reduced while population life expectancy can be increased. Furthermore, with adequate healthcare facilities, **population growth** in developed countries can be controlled.
- **Low unemployment rate:** The unemployment rate in developed countries is relatively low because every citizen can find work.
- **Mastering Science and Technology:** People in developed countries are more likely to have mastered science and technology, which has resulted in the introduction of new useful products to the market, such as industrial pendant lights. As a result, they have used s**ophisticated technology and modern tools** to help them in their daily lives.
- **Level of exports exceeds the level of imports:** Because developed countries have superior human resources and technology, the level of exports exceeds the level of imports.

7.4 Developed Countries: Criteria

- One such criterion is the income per capita; countries with high GDP per capita would thus be classified as developed.
- The most common metric used to determine whether an economy is developed or developing is per capita GDP, though no strict level exists for an economy to be classified as developing or developed. Some economists believe that a **country's per capita GDP of $12,000 to $15,000 is sufficient for developed status,** whereas others believe

that a country is not developed unless its per capita GDP is greater than $25,000 or $30,000.

- Another economic criterion is **industrialization**; countries, where the tertiary and quaternary sectors of industry predominate, would thus be classified as developed.
- Recently, another measure, the **Human Development Index (HDI)**, which combines an economic measure, national income, with other **measures, indices for life expectancy and education**, has gained prominence. This criterion would classify developed countries as having a **very high (HDI) rating**.

7.5 Top 10 Developed Countries

- Norway
- Ireland
- Switzerland
- Iceland
- Hong Kong, China
- Germany
- Sweden
- Australia
- Netherlands
- Denmark

7.6 Under Developed Countries

- An "**underdeveloped country**" is one that has widespread chronic poverty and less economic development than other countries.
- The term "underdeveloped country" is **unofficial**, but countries that would qualify as such are generally classified as developing countries or least-developed countries (LDCs) by the United Nations, which lists 46 nations as least-developed as of 2021.
- The World Bank refers to **underdeveloped countries as low-income countries** (a term that is gaining popularity), while other organizations refer to them as emerging markets, **newly industrialized countries, or members of the "Global South."**

7.7 Characteristic of UDCs

- **Low per capita income** and widespread poverty- People in developing countries make very little money. **In 2006, the United States' per capita GNP was $44,970 (US$). The average for low-income**

countries was $650 (US), which was less than 1.4 percent of that of the United States.

- **Lack of capital,** both public and private- Not only do very few citizens of developing countries own lumber yards, factories, and other businesses, but the government is nearly as poor and lacks funds to properly build and support roads, railways, schools, and hospitals, among other things.
- **Population explosion-** In most developing countries, the birth rate far outnumbers the death rate, resulting in overpopulation. If growth is too rapid, systems such as infrastructure, food supplies, and social services may be unable to keep up.
- **Excessive unemployment-** One of the most significant consequences of disproportionate population growth is skyrocketing unemployment, which is caused by a slow-growing job market matched with a rapidly expanding population.
- **The predominance of agriculture-** Agriculture still accounts for 40-50 percent of national income in most developing economies, compared to 2-8 percent in developed economies.
- **Small and ineffective investments-** Both citizens and governments in developing countries have little extra income to save or invest, and the little they do have is frequently invested in ways that do not lead to national growth.
- **Reduced productivity-** In underdeveloped countries, land, labor, and capital all produce less than in developed countries. Laborers are poorly educated, malnourished, and receive inadequate medical care. Existing resources are typically managed inefficiently or with less-technological solutions.

7.8 Top 10 underdeveloped countries in the world

- Niger
- Republic of Central African Republic
- Chad
- Burundi
- Mali
- South Sudan
- Burkina Faso (Burkina Faso)
- Sierra Leone (SL)
- Mozambique
- Eritrea

7.9 Least Developed Countries

- **Least-developed countries (LDCs) (also known as less-developed countries) are developing countries** that face significant structural challenges to long-term development.
- There are **currently 46 countries on the UN's list of LDCs**. Least-developed countries are **particularly vulnerable to economic and environmental shocks**, and they have fewer human assets than other countries.
- Least-developed countries are sometimes referred to as **"emerging markets" in some contexts**.
- LDCs have access to **specific international support measures for development assistance and trade** that more developed countries do not have.

7.10 Features of LDCs

- Least-developed countries (LDCs) are low-income countries that face **significant structural barriers to long-term development.**
- The **United Nations Committee on Development Policy** devised measures to assist LDCs in gaining access to and benefiting from international assistance.
- The United Nations' list of LDCs contained 46 countries as of October 2021.

7.11 LDCs: Criteria

The General Assembly (GA) and the **Economic and Social Council (ECOSOC)** have mandated the **Committee on Development Policy (CDP)** to review the list of LDCs every three years and make recommendations on the inclusion and graduation of eligible countries based on the following criteria:

Gross National Income (GNI) Per Capita

- **Rationale:** GNP per capita provides information on a country's income status as well as the overall level of resources available.
- **Thresholds:** The inclusion threshold is set at the three-year average of GNP per capita, as defined by the World Bank for identifying low-income countries. **In 2021, the threshold is less than 1046 USD GNI per capita.**
- **Methodology:** GNP is calculated by converting national accounts data into USD using the **World Bank Atlas method** (to reduce the impact of short-term exchange rate fluctuations) GNP per capita is calculated by dividing a country's GDP in USD by its annual population.

- **Sources of information:** The United Nations Statistics Division calculates GNP per capita using its National Accounts Main Aggregates Database. The United Nations Population Division provided the population data.

Human Assets Index (HAI)

- **Rationale:** The HAI is a measure of the level of human capital. Low levels of human assets indicate significant structural impediments to long-term development. A lower HAI indicates a lower level of human capital development.
- **Thresholds:** The CDP has used absolute thresholds for the HAI to determine inclusion and graduation eligibility since 2015. **The inclusion criterion was set at 60.** The graduation threshold is 10% higher than the inclusion threshold of 66.
- **Composition:** The HAI is made up of six indicators that are grouped into a health and education subindex, with each indicator carrying an equal weight of 1/6. Using a max-min procedure, the original values for each HAI indicator are converted into index numbers.

Economic & Environmental Vulnerability Index (EVI)

- **Rationale:** The Economic Vulnerability Index (EVI) is a measure of structural vulnerability to economic and environmental shocks. High vulnerability indicates significant structural impediments to long-term development. A higher EVI indicates greater economic vulnerability.
- **Thresholds:** The CDP has used absolute thresholds for the EVI to determine inclusion and graduation eligibility since 2015. The threshold for inclusion has been set at 36. The graduation threshold is 10% lower than the inclusion threshold of 32.
- **Composition:** The EVI is made up of eight indicators that are divided into economic and environmental subindices, with each indicator carrying an equal weight of 1/8. Using a max-min procedure, the original values for each EVI indicator are converted into index numbers.

7.12 Other indicators

Human Development Index

- The HDI was created to emphasize that people and their capabilities, rather than economic growth alone, should be the ultimate criterion for assessing a country's development.
- The HDI can also be used to question national policy choices, such as how two countries with the same per capita GNP can have such

disparities in human development outcomes. These contrasts can spark discussion about the government's policy priorities.

- The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development, such as living a long and healthy life, being knowledgeable, and having a good standard of living. The HDI is the geometric mean of the normalized indices for each dimension.

Happiness Index

Gross National Happiness Index is a much richer objective than GDP or economic growth. In this index, material well-being is important but is also important to enjoy sufficient well-being in things like community, culture, governance, knowledge, wisdom, wealth, health, spirituality, psychological welfare, balanced use of time, and harmony with the environment. GDP does not measure well-being.

7.13 Conclusion

Gross domestic product (GDP) is the total value of a country's finished domestic goods and services over a given time period. The gross national product (GNP), a related but distinct metric, is the value of all finished goods and services owned by a country's residents over time. GDP and GNP are two of the most commonly used measures of a country's economy, representing the total market value of all goods and services produced over a specified time period. However, Human Development Index (HDI) is an alternative and sustainable method to measure the growth of an economy.

8. Human Capital

The monetary value of a person's knowledge, skills, and competencies is referred to as **human capital**. To determine an individual's human capital, add up his current wages and what he is projected to earn in the future. The UPSC Indian Economic Syllabus includes Human Capital which is described in this article.

8.1 What is Human Capital?

- The **economic value** of a **worker's experience** and **skills** is referred to as human capital. Education, training, intelligence, skills, health, and other qualities valued by employers, such as loyalty and punctuality, are all examples of human capital.
- As a result, it is an **intangible asset** or characteristic that does not (and cannot) appear on a company's balance sheet.
- Human capital is thought to **boost productivity** and **consequently profits**.
- The more a firm invests in its personnel, the better its prospects of productivity and success increase.

8.2 Understanding Human Capital

- From the top down, an organisation is only as good as its people, which is why human capital is so important to a firm.
- Workforce planning and strategy, recruitment, employee training and development, and reporting and analytics are among the key directives.
- Human capital acknowledges that not all work is created equal. Employers, on the other hand, can improve the quality of that capital by investing in their workers.
- Employees' education, experience, and abilities can be used to accomplish this. All of this has a significant economic impact on employers and the whole economy.
- These investments in human capital can be easily calculated because they are based on the investment of employee skills and knowledge through education.
- Any human capital return on investment (ROI) can be computed by dividing the company's total profits by its entire human capital investments.
- For example, if Company Xyz invests $1 million into its human capital and has a total profit of $10 million, managers can compare the ROI

of its human capital year-over-year (YOY) in order to track how profit is improving and whether it has a relationship to the human capital investments.

8.3 Human Capital and Economic Growth

- Human capital has a strong relationship with economic growth, which is why it can help boost the economy.
- This is due to the fact that people have a wide range of abilities and information. This relationship can be assessed by how much money is invested in people's education.
- Some governments realise the link between human capital and the economy, and as a result, they provide free or low-cost higher education.
- People with a **greater level of education** are more likely to earn better salaries, allowing them to spend more.

8.4 Does Human Capital Depreciate?

- Human capital, like anything else, is subject to depreciation. Wages or the capacity to stay in the workforce is frequently used as indicators.
- Unemployment, injury, mental deterioration, and the inability to keep up with innovation are the most typical ways human capital depreciates.
- Consider an employee with a unique skill set. They may not be able to maintain these levels of specialisation if they are unemployed for a long time. That's because, once they reenter the workforce, their talents may no longer be in demand.

8.5 History of Human Capital

- Human capital is a concept that dates back to the 18th century. The concept was introduced by **Adam Smith** in his book '**An Inquiry into the Nature and Causes of the Wealth of Nations'**, which examined a nation's wealth, knowledge, training, abilities, and experiences.
- Adams proposed that increasing human capital through training and education results in a more profitable firm, which contributes to society's overall prosperity. That, according to Smith, makes it a **win-win situation** for everyone.
- The term was most recently used to denote the labour necessary to manufacture manufactured goods.
- But the most modern theory was used by several different economists including **Gary Becker** and **Theodore Schultz**, who invented the term in the 1960s to reflect the value of human capacities
- Schultz felt that human capital, like any other type of capital, could

be used to improve the quality and quantity of output. This would necessitate an investment in an organization's employees' education, training, and better benefits.

- But not all economists agree. Human capital, according to Harvard economist **Richard Freeman**, was an indicator of talent and competence.
  - He believes that in order for a company to truly become productive, it must teach and inspire its personnel as well as invest in capital equipment.
  - He came to the conclusion that human capital was not a component in production.

8.6 Criticism of Human Capital Theories

- Many people who work in the field of education and training have criticised the human capital idea.
- The theory was criticised in the 1960s primarily for legitimising **bourgeois individualism**, which was seen as greedy and exploitative.
- The bourgeoisie was made up of persons from the middle class who were seen to exploit the working class.
- The notion was also thought to hold people responsible for any systemic flaws and to turn employees become capitalists.

What Are Examples of Human Capital?

Communication skills, education, technical abilities, creativity, experience, problem-solving skills, mental health, and personal resilience are all examples of human capital.

8.7 Relationship between Human Capital and the Economy

- Human capital enables a country's economy to expand.
- Gains in human capital in fields like science, education, and management lead to increases in innovation, social well-being, equality, productivity, and participation rates, all of which contribute to economic growth.
- Increases in economic growth tend to increase a population's quality of life.

8.8 What is Human Capital Risk?

- The gap between a company's or organization's human capital requirements and its workforce's existing human capital is referred to as **human capital risk.**
- This chasm can lead to inefficiency, failure to meet goals, a tarnished

reputation, fraud, financial loss, and eventual liquidation of an organization.

- An organisation should teach, foster, and support its personnel to mitigate and eliminate human capital risk.

8.9 Conclusion

- Human capital is an intangible asset that is not recorded on the financial sheet of a corporation.
- The term "human capital" refers to qualities such as an employee's experience and skills.
- Because not all labour is created equal, firms can develop human capital by investing in their employees' training, education, and perks.
- Economic growth, productivity, and profitability are all seen to be linked to human capital.
- Human capital, like any other asset, can depreciate due to long periods of unemployment and a failure to stay up with technology and innovation.

9. Sources of Human Capital

Education is considered to be one of the most important **sources of human capital.** There are a number of other resources available as well. Investments in health, on-the-job training, migration, and information are some of the other ways to develop human capital. In this article Sources of **Human Capital** is described which is important for the UPSC exam.

9.1 What are the Sources of Human Capital?

Education, along with other sources such **as health, migration, on-the-job training, and knowledge**, is recognised as one of the most important sources of human capital. Let's discuss it one by one.

Investment in Education

- The most effective strategy to develop and expand the state's productive workforce is to strengthen and expand the educational system.
- It is recognized as the **foundation for the development of human capital,** which is why parents and the government invest more in education.
- The following are some of the reasons why individuals and governments invest more in education:
  - To increase their future earnings.
  - To increase manpower and improve technical capabilities, hence increasing worker productivity and resulting in economic growth.
  - Reduce the birth rate and make the most resources accessible each person to manage the population growth rate.
  - It is possible to impart knowledge and education to others, resulting in social benefits.

Health-related investments

- The health sector is the second most important source of human capital formation.
- Providing clean and safe drinking water, medicinal drugs, are few examples of health-related investments.

Migration

- Individuals migrate from their native place to another place in order to obtain higher salaries and better jobs.
- **Unemployment is the primary driver** of rural-urban migration in India.

- Other professionals, such as doctors and engineers, relocate from one country to another in pursuit of better possibilities.
- In both cases, migration costs include transportation costs, as well as the cost of living in the relocated location.
- Increased earnings in the new location outweigh the costs of migration. As a result, migration investment is another source of human capital formation.

On-the-Job Training

- Many businesses provide on-the-job training **to boost labour productivity**.
- This is a costly source of income, and employers suffer significant costs for delivering on-the-job training.
- In-house training, training under the supervision of a professional supervisor, and off-campus training are some examples.

Investment in Information

Spending money can provide access to information on education and health. For example, data on salaries is prepared for various markets.

9.2 Problems of Human capital Formation

- **Population growth**: Rapid population growth, particularly in emerging nations, can have an impact on the quality of human capital formation. It reduces the current facility per capita availability. A huge population necessitates additional investments.
- **Long process**: Because skill growth takes time, the approach used for human development is a long process. As a result, the procedure becomes unusually slow.
- **Gender inequality and high regional disparity:** Gender inequality and wide regional disparities have an impact on human growth ability.
- **Insufficient on-the-job training:** In the agriculture industry, workers do not receive on-the-job training to operate sophisticated equipment.
- **Poverty:** Poverty is widespread in India, with a huge fraction of the population living in poverty. As a result, they have limited access to primary health care and education.

9.3 Conclusion

Education investment is one of the most important sources of Human Capital Formation. There are numerous more sources of human capital production, including on-the-job training, health-care investment, information, and migration.

Chapter 9: Inclusive Growth

1. Human Capital and Development

In economics, the terms **"human capital"** and **"human development"** are used to describe human resources. This is a crucial economic concept that deals with how human resources are viewed in these terms. Human capital refers to the skills, training, experience, education, knowledge, know-how, and competencies that humans bring to a company, whereas human development in an economy is determined by a composite statistic that includes life expectancy, education, and per capita income. This article will explain to you the concepts related to **Human Capital and Human Development** which will be helpful in Indian Economy preparation for the UPSC exam.

1.1 Human Capital

- Human capital is a **measurement of labour capabilities** that encompass skills, working capacity, education, health, and intelligence.
- The concept of human capital emphasises the fact that not all resources are equal, but that this gap may be bridged with sufficient training and investment.
- **Employee skills, experience, and education** are immensely valuable to a business, as they generate economic value for the company and the economy as a whole.
- Human capital is valued in the corporate world because it aids in enhancing productivity, which is linked to profitability.
- As a result, according to the human capital notion, a company might become more profitable by investing more in its personnel.

1.2 Role of Government

There is little political will and investment in this sector because it is difficult to establish a clear cause and effect relationship between human capital growth (education, health, etc.) and economic growth. However, human capital investments cannot be completely outsourced to private players. Government intervention is required in this area because:

- Since **education** and **health** provide both private and social benefits, these fields require both private and public institutions.
- Education and health spending have a long-term impact that cannot be easily reversed, necessitating government intervention.

- Individual consumers of these services lack comprehensive information about the quality and cost of these services. If adequate government regulation is not present, this may result in monopoly power and exploitation by private players.
- Government intervention is required in this area to **improve accessibility** and **provide low-cost services** to the poor.
- Furthermore, the **World Economic Forum** believes that strengthening the policy and institutional ecosystems that support inclusive growth and human capital development should be a top policy priority for countries, regardless of whether they are experiencing slow growth, elevated inequality, or both.
    - This is critical for countries that want to thrive in the **Fourth Industrial Revolution**.
    - As a result of the intrinsic and instrumental value of human capital, the government should actively participate in this arena.
- The government is focusing on milking the demographic dividend with a slew of measures and policies such as the **New Education Policy, the New Health Policy, and legislation such as the National Medical Commission**, among others.
- Concurrently, according to the Economic Survey, the government's spending on the social sector has increased.

1.3 Human Development

- The process of **expanding human capabilities** in terms of abilities and rights is referred to as human development.
- The goal of human development is to create an environment that allows **people to live healthy, creative, and long lives**.

1.4 Human Development - Agenda of the Government

- Human development is a priority in government policies.
- Over the last few years, the government has accelerated efforts in this direction through the inclusiveness mantra **'Sabka Sath, Sabka Vikas,'** which has been further elaborated by ensuring **'Sabka Vishwas.'**
- Because India is a developing economy with limited resources, we must prioritise and optimise social infrastructure spending to promote sustainable and inclusive growth.
- At this juncture, it is critical to prioritise public investments in human capital while also strengthening the delivery mechanisms of government interventions to ensure transparency and accountability.

- With India's demographic advantage, improving educational standards, skilling the youth, expanding job opportunities, reducing disease burden, and empowering women will all contribute to realising the potential of a thriving economy in the future.'

1.5 Human Development Report

- **UNDP** publishes the Human Development Report (HDR) i.e., the **Human Development Index (HDI).**
- The HDI considers **three indicators:** a long healthy life, access to knowledge, and access to a decent standard of living.

1.6 Difference between Human Capital and Human Development

Basis of Difference	***Human Capital***	***Human Development***
Concept	It is a comparatively narrow concept	It is a comparatively broader concept
Central theme	It considers that health and education are the most effective ways to increase labor productivity.	It believes that health and education contribute to an individual's total growth, as a healthy person with good knowledge may make decisions that will help them live a happy and healthy life.
Welfare	When it comes to human capital, health and education are ineffective unless they lead to increased production.	It considers that human welfare is increased by having good health and proper education even if they do not result in any improvements in productivity

1.7 Conclusion

Human capital and human development are closely linked but not identical ideas. Human capital refers to the stock of a nation's human talents and expertise at a certain point in time, whereas human development refers to a national human capital's holistic development and well-being.

2. Sustainable Development

Sustainable development is defined as development that meets current needs without compromising future generations' ability to meet their own. When it comes to production, using recycled materials or renewable resources is an example of sustainable development. The UPSC Indian Economic Syllabus includes Sustainable development which is described in this article.

2.1 What is Sustainable Development?

- Development that meets current demands without compromising future generations' ability to meet their own needs.
- In its report Our Common Future, the **Brundtland Commission** provided the most widely accepted definition of sustainable development (1987).
- Sustainable development (SD) entails a concerted effort to create a future for people and the planet that is inclusive, sustainable, and resilient.

2.2 Core Elements

- **Economic growth, social inclusion, and environmental conservation** are three key components of long-term development. Harmonizing them is crucial.
- Sustainable development requires long-term economic growth, a stable livelihood, living in harmony with nature, and the use of appropriate technology.

Environmental Sustainability

- It guarantees that nature is not treated as an unending supply of resources and that it is protected and used responsibly.
- Environmental conservation, renewable energy investment, water conservation, sustainable transportation support, and sustainable construction and design innovation all contribute to achieving environmental sustainability on multiple levels.

Social Sustainability

It has the potential to promote gender equality, the development of people, communities, and cultures, as well as a fair and equitable distribution of quality of life, healthcare, and education around the world.

Economic Sustainability

- Focuses on achieving equitable economic growth that provides wealth for all while minimising environmental damage.
- Economic resources should be invested in and distributed equally.
- Poverty in all of its forms and dimensions must be eradicated.

2.3 Global issues

- National economies are growing inequitably (North-South Divide).
- **Biodiversity Loss:** Despite concerted efforts over the last two decades, the world's biodiversity continues to be lost.
- **Climate Change:** Because climate change is a global issue, it necessitates a worldwide response. Particular attention must be made to the special issues that developing countries face when it comes to climate change.
- Combating climate change and promoting sustainable development are two concerns that are mutually reinforcing.
- **Intellectual Property Rights (IPRs):** All people, rich and poor, should be able to afford to access the products of innovation that can lead to long-term growth.

2.4 Global Initiatives

- **The Stockholm Conference, 1972**: It was the first step towards putting environmental issues on the international agenda.
  - It resulted in the **Stockholm Declaration**, which included principles and an Action Plan with environmental policy suggestions.
- **UNEP** was established in **1972** to act as a catalyst for the development and coordination of an environmental focus in other organisations' programmes.
- The **Brundt land Commission's Report** was a direct result of the **Earth Summit in 1992**. Rio de Janeiro hosted the event. The following documents were produced as a result of the Conference:
  - The Framework Convention on Climate Change (UNFCCC)
  - The Convention on Biological Diversity
  - The Statement on Forest Principles
  - The Rio Declaration
  - Agenda 21
- Kyoto Protocol,1997
- **Rio +10, 2002:** The World Summit on Sustainable Development

(WSSD) in Johannesburg was a 10-year evaluation of the Rio outcomes (Rio +10).

- Ramsar Convention, 1971
- **The 1972 World Heritage Convention:** It is responsible for identifying and preserving the world's cultural and natural treasures. It compiles a list of **"heritage sites,"** which are cultural, natural, or combined regions of "great universal importance" that must be maintained for the sake of all people.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1973
- Convention on the Conservation of Migratory Species of Wild Animals (CMS), 1979
- Vienna Convention for the Protection of the Ozone Layer, 1985
- Montreal Protocol on Substances that Deplete the Ozone Layer, 1987
- Basel Convention, 1989
- Convention on Biological Diversity, 1992
- United Nations Convention to Combat Desertification, 1994
- Rotterdam Convention, 1998
- Stockholm Convention on Persistent Organic Pollutants, 2001
- Global Tiger Forum, 1993
- International Whaling Commission,1946
- Minamata Convention,2013
- Climate change mitigation strategies: Carbon sequestration, Carbon sink, Carbon Credit, Carbon trading, Carbon offsetting, Carbon Tax, Geo-engineering.
- United Nations Environment Programme (UNEP)
- UN Commission on Sustainable Development (CSD)
- United Nations Convention on the Law of the Sea (UNCLOS)
- Climate Finance Architecture: Green Climate Fund (GCF), Adaptation Fund (AF) and Global Environment Facility (GEF)
- Reducing Emissions from Deforestation and Forest Degradation (REDD) and REDD+
- Paris Agreement 2015
- The Clean Development Mechanism is a way to reduce greenhouse gases (GHGs) emissions through efficient and sound technologies.
- Global Alliance for Climate-Smart Agriculture (GACSA)
- Partnership for Action on Green Economy (PAGE)

2.5 Goals

- The **United Nations (UN)** launched the **2030 Agenda** for Sustainable Development and the **Sustainable Development Goals (SDGs)** to mainstream sustainable development.
- Over the next 15 years, this comprehensive, integrated, and revolutionary agenda intends to encourage measures that will end poverty and establish a more sustainable world.
- By 2030, 17 goals and 169 specific milestones must be accomplished. To achieve the goals, governments, corporations, civic society, and individuals from all walks of life must all work together.
- The Sustainable Development Goals (SDGs) are **not legally binding.**

2.6 Conclusion

- To make the process of sustainable development feasible and operational, it is critical to establish a common focus that can integrate the perspectives and efforts of various development participants around the world, while taking into account the diversity of geography, society, economics, science, and technology capabilities and capacities, and educational standards and levels.
- Developed countries must alter their production and consumption patterns, restricting the use of fossil fuels and plastics, and encouraging public and private investments that support the SDGs.

3. Sustainable Development Goals

All members of the United Nations accepted the **Sustainable Development Goals** agenda in **2012** at the **Rio De Janeiro Council Meeting**, with the goal of promoting a healthy and developed future for the planet and its people. After a successful fifteen-year development plan known as the **Millennium Development Goals**, the Sustainable Development Goals were implemented in 2015. The UPSC Indian Economic Syllabus includes Sustainable development goals which are described in this article.

3.1 Background

In September 2000, the United Nations-mandated that all of its members adhere to a Millennium Development Goal, which consisted of a set of eight time-bound goals that were to be met within a fifteen-year period. The eight targets of the Millennium Development Goals were as follows:

1. To make extreme poverty and hunger a thing of the past.
2. To make primary education universal
3. To advance gender equality and women's empowerment
4. To lower the infant mortality rate
5. To improve the health of mothers
6. HIV/AIDS, malaria, and other diseases are being combated.
7. To ensure long-term environmental viability
8. Creating a global development partnership

In 2015, the UN received a final report confirming the beneficial impact of the Millennium Development Goal on the eight parameters as well as the maternal mortality rate. Once the MDG's 15-year target was met, the responsibility for development was transferred to the Sustainable Development Goal's 17 targets.

3.2 What are the 17 Sustainable Development Goals?

- The Sustainable Development Goals are a series of seventeen pointer targets that all UN members have pledged to work on in order to improve the country's future.
- **"Future We Want,"** a documentary played at the Rio+20 meeting, proposed a post-2015 development agenda.
- The Sustainable Development Goals (SDGs) are an intergovernmental agreement that **replaces the Millennium Development Goals** as the post-2015 development agenda.

- The Open Working Group on Sustainable Development Objectives of the United Nations General Assembly set **17 goals** with 169 targets and 304 indicators to be accomplished by 2030.
- The United Nations Sustainable Development Summit established a post-negotiation agenda named **"Transforming Our World: the 2030 Agenda for Sustainable Development."**
- The Rio+20 summits (2012) in Rio de Janeiro produced the SDGs, which are non-binding document.

The 17 goals that make up the Sustainable Development Goals are as follows:

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improve nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all stages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. Built resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. Reduce inequalities within and among countries.
11. Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. Ensure sustainable consumption and production pattern.
13. Take urgent actions to combat climate change and its impact.
14. Conserve and sustainably use the oceans, seas, and marine resources.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.

17. Strengthen the means of implementation and revitalise the global partnership for sustainable development.

3.3 Sustainable Development Goals in India

According to the latest **SDG India Index** from **NITI Aayog**, India has made steady progress toward achieving the United Nations' Sustainable Development Goals (SDGs) in the areas of **health, energy, and infrastructure**.

India's track record in terms of achieving the Sustainable Development Goals:

- The **Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA)** is being implemented to offer jobs and enhance the living standards of unskilled labourers.
- The **National Food Security Act** is in place to ensure that subsidized food grains are available.
- The government of India aims to make India open defecation free under its flagship program **Swachh Bharat Abhiyan.**
- **Renewable energy generation targets** have been set at 175 GW by 2022 in order to maximize the use of solar energy, wind energy, and other renewable energy sources while reducing reliance on fossil fuels.
- To improve infrastructure, the **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** and **Heritage City Development and Augmentation Yojana (HRIDAY)** projects have been implemented.
- By ratifying the **Paris Agreement,** India has demonstrated its commitment to combating climate change.

3.4 Sustainable Development Goals Report 2020

The Sustainable Development Goals Report 2020 was released on July 7, 2020. According to the research, the COVID-19 epidemic triggered an unprecedented catastrophe, severely disrupting SDG development. The following are the important points from the SDG report:

- In areas such as maternal and child health, boosting access to electricity, and increasing women's representation in government, progress has been made.
- In 2020, an estimated 71 million people would be forced back into extreme poverty, the first increase in global poverty since 1998. Loss of a job is reported to be the main cause, and persons who were previously secure may now be at risk of poverty.
- Approximately **1.6 million vulnerable employees** have been left

unemployed or underemployed around the world, with wages estimated to have decreased by 60% during the crisis.

- During the pandemic, **women and children,** as well as persons living in slums, were the **hardest hit.**
- School closures have kept **90% of pupils** (1.57 billion) out of class, causing almost 370 million children to miss out on essential school meals.
- Poverty, unemployment, and life-threatening situations have increased the likelihood of child labor and human trafficking.

Apart from the aforementioned points, the paper claims that climate change is still happening at a considerably faster rate than predicted. **The year 2019 was the second warmest on record,** and it marked the end of the warmest decade in human history, which lasted from 2010 to 2019.

3.5 Impact of SDG & MDG

- The Millennium Development Goals served as a springboard for UN members to strive for a more developed and prosperous future for their countries and people.
- The Millennium Development Goals (MDGs) were approved in 2000, and the final report presented in 2015 clearly states that the rate of infant mortality has decreased, that poverty has decreased, that safe drinking water and sanitation have been provided, and that people's mental health has improved dramatically.
- The Sustainable Development Goals are meant to make the world a better place to live by 2030, following in its footsteps.
- The plan was approved in 2015, and reports produced by the UNDP show that numerous activities have been made for the welfare of the nation and that people's livelihoods have improved around the world.
- The Sustainable Development Goals have helped to lower maternal mortality rates, reduce poverty, enhance people's health, and raise awareness of infectious and non-communicable diseases, as well as the immunizations that are essential for children.
- Mental illness is being treated as a big concern, and efforts are being made to provide better medication to the world.
- Overall, the Sustainable Development Goals aim to make the world a better place to live by achieving their targets within the 15-year time frame set by the United Nations and eradicating poverty, improving health, providing employment, empowering women, reducing inequalities, and adhering to all of the UN's seventeen targets.

3.6 Conclusion

- The concept of sustainable development states that human civilizations must survive and meet their needs without jeopardizing future generations' ability to meet their own needs.
- The Brundt land Report, published in 1987, was the first to provide an "official" concept of sustainable development.
- Sustainable development is defined as the creation of a new community in a previously undeveloped area without destroying the ecosystem or harming the environment.
- The goal of sustainable development is to meet today's requirements while without jeopardizing tomorrow. This means we can't keep utilizing present amounts of resources since future generations won't have enough.

4. Inclusive Growth

The **United Nations Development Program (UNDP)** defines **inclusive growth** as **"the process and result of all groups of people participating in the organisation of growth and benefiting equally from it."** This indicates that inclusive growth should include all segments as both beneficiaries and collaborators in growth and that the excluded should be included in the process. This article will explain to you the concepts related to Inclusive Growth which will be helpful in Indian Economy preparation for the UPSC exam.

4.1 What is Inclusive Growth?

- Inclusive growth is defined as **economic growth** that generates **job opportunities** and aids in **poverty reduction.**
- It entails poor people having access to basic health and education services.
- It entails ensuring equitable opportunity for everybody, as well as empowering people via education and skill development.
- It also includes a method of growth that is environmentally sustainable, aspires for good governance, and aids in the creation of a gender-conscious society.
- According to the **OECD (Organisation for Economic Co-operation and Development)**, inclusive growth is defined as economic growth that is evenly dispersed across society and generates opportunity for everyone.

4.2 Elements

Skill Development

- The working-age population's employability, as well as their health, education, vocational training, and skills, will all play a role in capturing the demographic dividend. Here, skill development is crucial.
- In terms of skill development, India is up against two obstacles:
  - There is a scarcity of highly skilled workers.
  - There is a lack of employment opportunities for conventionally educated teenagers.
- According to the Economic Survey 2017, nearly 30% of India's youngsters are unemployed (Not in education, employment or training).
- Similarly, according to UNICEF 2019, at least 47 percent of Indian adolescents will not have the education and skills required for employment in 2030.

Financial Inclusion

- Financial inclusion is the process of ensuring that marginalised populations have inexpensive access to financial services.
- Financial inclusion is essential for inclusive growth because it promotes a saving culture, which kicks off a virtuous cycle of economic progress.

Technological Advancement

- The world is rapidly approaching the **fourth industrial revolution**. Depending on how these technology breakthroughs are implemented, they have the potential to reduce or worsen inequality.
- The government has made several initiatives, like as the **Digital India Mission**, to ensure that a technologically literate people can take use of technology's limitless possibilities.
- Technology can also assist in the fight against other issues, such as:
    - **Agriculture -** Modern technology can help to improve the efficiency and competitiveness of an agro-value chain from farmer to consumer.
    - **Manufacturing -** Technology can handle issues like financing, obtaining raw materials, acquiring land, and establishing connections with the user market. GST was only possible thanks to cutting-edge technology.
    - **Education -** New types of adaptive and peer learning can be created using innovative digital technologies, which provide access to trainers and mentors while also delivering relevant data in real-time.
    - **Health**-related technologies have the potential to change the way public health services are delivered.
    - **Governance** - Technology has the potential to reduce delays, corruption, and inefficiency in the delivery of public services.

Economic Growth

- India is one of the world's fastest-growing major economies. However, the Indian economy is currently slowing due to both cyclical and structural issues.
- However, India's goal of having a $5 trillion economy by 2024-25 can help the country reduce inequality, expand social spending, and provide jobs for everyone.

Social Development

- It includes the empowerment of all marginalised groups, such as SC/ ST/OBC/Minorities, women, and transgender people.

- Empowerment can be achieved by upgrading social institutions such as hospitals, particularly basic care in rural regions, schools, and universities.
- Investment in social structures will not only stimulate GDP (via fiscal stimulus) but will also produce a healthy and capable workforce for the future.

4.3 Challenges in Achieving Inclusive Growth

Poverty

- According to the 2018 **Multidimensional Poverty Index (MPI)**, India moved 271 million people out of poverty between 2005-06 and 2015-16, with the poorest regions, groups, and children experiencing the greatest reduction in poverty. At the subnational level, India exhibits the clearest pro-poor tendency.
- Despite the enormous achievements, 373 million Indians continue to suffer from severe poverty.
- Furthermore, 8.8% of the population is living in severe multidimensional poverty, while 19.3 percent is vulnerable to multidimensional poverty.

Unemployment

- According to the **NSSO's Periodic Labour Force Survey (PLFS)**, the unemployment rate for the urban workforce was 7.8%, while the rural workforce had a rate of 5.3 percent, bringing the total unemployment rate to 6.1 percent.
- Because of illiteracy and over-dependence on agriculture, India's employment quality and quantity are low.
- The lack of quality employment is a concern because more than 80% of individuals work in the informal sector and are not covered by social security.

Agriculture Backwardness

- Agriculture employs almost 44 percent of Indians, although it only accounts for 16.5 percent of the country's GDP, resulting in widespread poverty.
- The following are some of the issues in agriculture:
  - Land availability per capita is dwindling.
  - A gradual decrease in the employment share.
  - Labor productivity is low.

- Agriculture yields are declining as a result of climate change, soil degradation, and water scarcity.
- Growth differences between regions and crops

Issues with Social Development

- One of the most important concerns for inclusive growth is social development. It has some issues, such as:
  - Regional, societal, and gender differences are all significant.
  - Public spending, notably in health and education, is at a low level and growing slowly.
  - The delivery system's poor quality.
  - OBC, SC, ST, and Muslims have considerably lower social indicators.
  - Children's malnutrition - India is ranked 102nd in the Global Hunger Index.

Regional Disparities

- India's regional differences are a key source of concern.
- Factors such as the caste system, the wealth gap, and others contribute to regional inequities, resulting in a society in which certain groups enjoy greater privileges than others.
- The following are some of the regional disparity issues:
  - Kerala is the most literate state in the country, with a literacy rate of 93.1 percent; nevertheless, Bihar's literacy rate is only 63.82 percent.
  - In terms of per capita income, Goa has a per capita income of Rs 4,67,998, whereas Bihar has a per capita income of merely Rs 43,822.

4.4 Measuring Inclusive Growth

Inclusive Development Index (IDI)

- **India was placed 62nd** out of 74 emerging countries in the **World Economic Forum's Inclusive Development Index (IDI)**, and was among the least inclusive countries in the Group of 20 (G-20).
- The IDI is based on the assumption that most people measure their country's growth by their personal level of living rather than GDP.
- It gives a measure of inequality based on three parameters: :
  - Growth and development

  - Inclusion
  - Inter-generational equity and sustainability.
- India was also not among the top ten most inclusive emerging and developing economies, a list that included Nepal, China, and Sri Lanka.
- India ranked 44th in terms of "intergenerational equity and sustainability," which can be ascribed to the country's demographic dividend.

Social Progress Index (SPI)

It is a composite index that includes the following social and environmental indicators:

1. Basic human need
2. Foundation of well being
3. Opportunity

Global Slavery Index

- The **Walk Free Foundation of Australia** has released it.
- Slavery in the modern sense refers to a scenario in which one person has taken away another's freedom in order to control their body and exploit them.
- Factors that contribute to modern slavery include:
  - Absence of rights
  - Lack of physical safety
  - Access to necessities such as health care, education, food, etc
  - Pattern of migration

4.5 Measures Taken in India to Achieve Inclusive Growth

The government is implementing a number of measures to promote equitable growth, including the following:

- Mahatma Gandhi National Rural Employment Guarantee Act Scheme (MGNREGA)
- Prime Minister's Employment Generation Programme (PMEGP)
- Mudra Bank scheme
- Pt. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)
- Deendayal Antyodaya Yojana- National Urban Livelihoods Mission (DAY-NULM)
- Sarva Siksha Abhiyan (SSA)

- National Rural Health Mission (NRHM)
- Bharat Nirman
- Swachh Bharat Mission
- Mission Ayushman
- Pradhan Mantri Jan Dhan Yojana

4.6 Conclusion

- To enhance the lives of India's people, the Indian government, along with state and local governments, should continue to focus on eradicating poverty and attaining sustainable development.
- Inclusive and equitable growth can be targeted through innovative partnerships with international organisations, civic society, and private firms.
- Inclusive growth will aid in the empowerment of disadvantaged and marginalised communities, as well as the improvement of livelihoods and skill development for women.

5. Multidimensional Poverty Index

The Oxford Poverty and Human Development Initiative publish the Global **Multidimensional Poverty Index (MPI)**. The goal of this index is to use a variety of variables to **evaluate acute multidimensional poverty in emerging countries**. It was created in **2010 by OPHI in collaboration with the United Nations Development Programme (UNDP)**. It is published annually as part of the UNDP's Human Development Report (HDR). In **September 2021**, MPI 2021 was issued. India was placed **62 out of 107 nations in the Global MPI 2020**. In this article, we will study about Multidimensional Poverty Index, which is important for **UPSC Examination.**

5.1 What is Multidimensional Poverty Index?

- The global Multidimensional Poverty Index (global MPI) is a **poverty indicator** that takes into account the numerous disadvantages that impoverished people endure in terms of **education, health, and living conditions**.
- The Global MPI measures **both the occurrence** (the percentage of people in a population that are multidimensionally poor) **and degree of multidimensional poverty** (the average number of deprivations that each poor person experiences).
- It **enables for comparisons between countries, regions, and the world**, as well as within countries by ethnic group, urban/rural location, and other features of households and communities.

5.2 Dimensions and Indicators of Global MPI

The performance of countries is measured using three dimensions and ten indicators. The following are listed below:

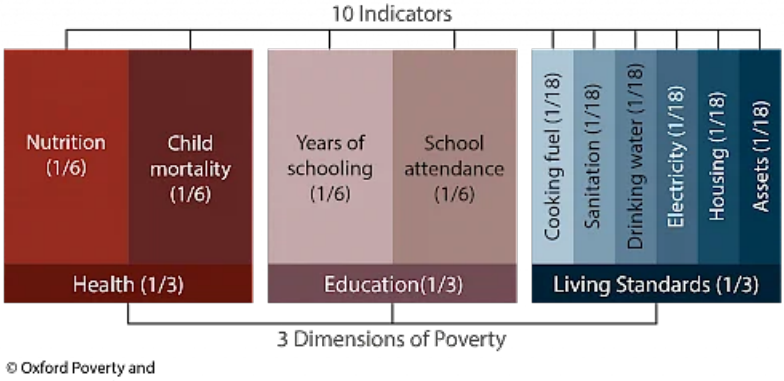


TABLE 5.1: MULTIDIMENSIONAL POVERTY INDEX AND SDGs

The measurement of acute multidimensional poverty also keeps track of countries' progress toward the Sustainable Development Goals (SDGs) targets:

Dimensions of Poverty	***Indicator***	***Deprived If Living In A Household Where…***	***Weight***	***SDG Area***
Health (1/3)	Nutrition	Any person under 70 years of age for whom there is nutritional information is undernourished.	1/6	SDG 2: Zero Hunger
Child mortality	A child under 18 has died in the household in the five-year period preceding the survey.	1/6	SDG 3: Health and Well-being	
Education (1/3)	Years of schooling	No eligible household member has completed six years of schooling.	1/6	SDG 4: Quality Education
School attendance	Any school-aged child is not attending school up to the age at which he/she would complete class 8.	1/6	SDG 4: Quality Education	
Living Standards (1/3)	Cooking fuel	A household cooks using solid fuel, such as dung, agricultural crop, shrubs, wood, charcoal, or coal.	1/18	SDG 7: Affordable and Clean Energy
Sanitation	The household has unimproved or no sanitation facility or it is improved but shared with other households.	1/18	SDG 6: Clean Water and Sanitation	
Drinking water	The household's source of drinking water is not safe or safe drinking water is a 30-minute or longer walk from home, roundtrip.	1/18	SDG 6: Clean Water and Sanitation	

(contd.)

Electricity	The household has no electricity.	1/18	SDG 7: Affordable and Clean Energy	
Housing	The household has inadequate housing materials in any of the three components: floor, roof, or walls.	1/18	SDG 11: Sustainable Cities and Communities	
Assets	The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike, or refrigerator, and does not own a car or truck.	1/18	SDG 1: No Poverty	

5.3 How Deprivation is measured using MPI's indicators?

According to OCHI, the following factors contribute to the deprivation of living in a household:

1. A person between the ages of 0 and 70 who is malnourished.
2. In the five years leading up to the MPI survey, a child aged 0 to 18 died.
3. No eligible household has finished the six years of schooling.
4. The school-aged youngster does not attend school until the age of eight, when he or she should be in class eight.
5. Solid fuel, such as cow dung, is used as a cooking fuel in the home.
6. The presence of an inadequate or non-existent sanitation facility. Improved sanitary facilities shared with other houses result in living deprivation as well.
7. The lack of access to safe drinking water. Also, if the safe drinking water is only accessible after a 30-minute round-trip walk from home.
8. Households are without electricity.
9. Housing materials are insufficient in any of the three components: floor, roof, or walls.
10. When a family does not own a car or a truck but only has one of the following:
    - Radio

- TV
- Telephone
- Computer
- Animal cart
- Bicycle
- Motorbike
- Refrigerator

The following points about Global MPI should be noted:

- It analyses poverty on a person-by-person basis.
- When a person is deficient in one-third of the 10 indications, he or she is labelled as "MPI Poor."
- The percentage of deprivations experienced by an individual is used to determine the depth of their poverty.

5.4 Global Multidimensional Poverty Index 2021 – Key Findings

- According to the Global MPI 2021,
- **1.3 billion People live in acute multidimensional poverty** in 109 countries.
- **644 million** of the 1.3 billion people are **children** (under the age of 18), while 105 million are adults (above the age of 60).
- In Saharan Africa or South Asia, over 85% of multidimensional poor people dwell.
- **Rural areas are home to 84 percent of the impoverished**.
- Middle-income countries are home to 67 percent or more of the world's multidimensional poor population.
- A total of 481 million people live with an out-of-school child.
- 550 million people do not have a car and lack at least seven of the eight assets (radio, television, telephone, computer, animal cart, bicycle, motorcycle, or refrigerator).
- Within a 30-minute roundtrip walk, 568 million people do not have access to improved drinking water.
- 635 million people live in families where no one has finished at least six years of education.
- 678 million people do not have access to electricity.
- 788 million people live in a family where at least one person is malnourished.

- Solid cooking fuels, poor sanitation, and unsuitable housing affect each of the billions.

5.5 Global MPI – India and Its Neighbours

The National Family Health Survey in India is used by the MPI to collect data (NFHS). India placed 62nd in MPI 2020 with a score of 0.123. India has a headcount ratio of 27.91 per cent in the Global MPI 2020.

India's Neighbors were ranked by the MPI in 2020 as follows:

- Sri Lanka – 25
- Nepal – 65
- Bangladesh – 58
- China – 30
- Myanmar – 69
- Pakistan – 73

The Multidimensional Poverty Index Coordination Committee (MPICC) in India is the MPI's key agency.

5.6 National Multidimensional Poverty Index: NITI Aayog

On **November 20, 2021**, the government think tank **Niti Aayog announced the first-ever Multi-dimensional Poverty Index (MPI)**, which measures poverty at the national, state/UT, and district levels. According to the first index, **Bihar is the state with the highest level of multidimensional poverty**

5.7 Overview of National Multidimensional Poverty Index

- The MPI aims to quantify poverty in all of its forms, complementing existing poverty statistics based on per capita consumption spending.
- **India is ranked 66th out of 109 countries in the Global MPI 2021.** The National MPI aims to **deconstruct the Global MPI and create a globally aligned but customised India MPI for developing comprehensive Reform Action Plans**, with the overall goal of improving India's place in the Global MPI rankings.
- **Health, education, and standard of living** are the three equally weighted dimensions.
- Nutrition, school attendance, years of schooling, drinking water, sanitation, housing, and bank accounts are only a few of the metrics that illustrate these three dimensions.

5.8 Methodology & Data

- The national MPI is based on the internationally recognised and reliable methodology created by the Oxford Poverty and Human Development

Initiative (OPHI) and the United Nations Development Programme (UNDP).

- This baseline report for the national MPI measure is based on the National Family Health Survey's reference period of 2015-16. (NFHS-4).
  - The NFHS-4 data was used to create a baseline multidimensional poverty estimate in order to understand the reality on the ground prior to the full implementation of several central government programmes.
  - NFHS-4 comes before the full implementation of the (central government's) flagship housing, drinking water, sanitation, power, cooking fuel, financial inclusion, and other key measures to improve school attendance, nutrition, mother and child health, and other major endeavours.
  - However, it should be emphasised that the NFHS-5 data indicates that access to clean cooking fuel, sanitation, and electricity has improved, resulting in a reduction in impoverishment.

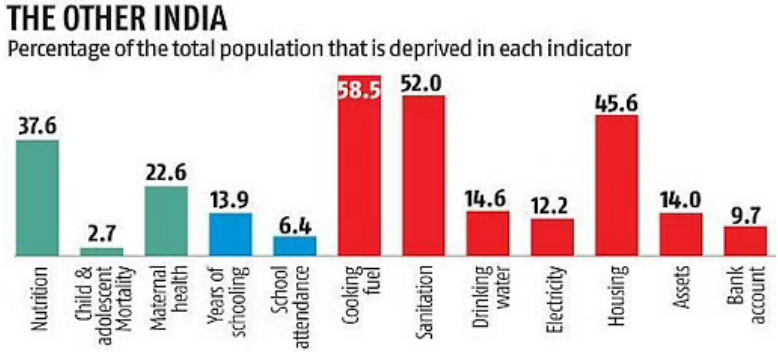
5.9 Finding of the Index

5.9.1 *Levels of Poverty*

- Bihar has the biggest proportion of multidimensionally poor persons in the state, followed by Jharkhand and Uttar Pradesh.
- Kerala has the lowest population poverty rate, with Puducherry, Lakshadweep, Goa, and Sikkim following closely after.

5.9.2 *People that are malnourished*

- Jharkhand, Madhya Pradesh, Uttar Pradesh, and Chhattisgarh have the largest number of malnourished people, followed by Bihar, Madhya Pradesh, Uttar Pradesh, and Chhattisgarh.



5.10 Significance of the Index

5.10.1 *Contribution towards Instituting Public policy Tool*

The Index's creation is an important step toward establishing a public policy tool that monitors multidimensional poverty and informs evidence-based and targeted interventions, ensuring that no one is left behind.

5.10.2 *Provides an Overview of Poverty*

This provides an overall picture of poverty in the country while also allowing for more detailed and in-depth analyses of areas of interest such as regions – state or districts – and specific sectors, and it supplements existing monetary poverty statistics.

5.10.3 *Contribute to the achievement of the SDGs*

It contributes to measuring progress toward Sustainable Development Goal (SDG) target 1.2, which aims to reduce "at least by half the proportion of men, women, and children of all ages living in poverty in all its dimensions."

5.11 Conclusion

The Multidimensional Poverty Index aims to measure poverty in all of its dimensions, effectively supplementing existing poverty statistics based on per capita consumption expenditure. India is ranked 66th out of 109 countries in the Global MPI 2021. The government think tank Niti Aayog announced the first-ever Multi-dimensional Poverty Index (MPI) on November 20, 2021, which measures poverty at the national, state/UT, and district levels.

6. National Food Security Act

Food Security is a prime task for the Government, as it deals with Individual's Fundamental Rights. India still to a major extent possesses a rural character and agriculture is the backbone of it. **The National Food Security Act, 2013** (NFSA 2013) converts existing food security programs of the **Government of India** into legal entitlements. **The National Food Security Act** (also known as the **'Right to Food Act**) is an Indian Parliament Act that aims to provide subsidized **food grains** to roughly two-thirds of the country's 1.2 billion people. It was signed into law on September 12, 2013, with retroactive effect to July 5, 2013.

6.1 Features

- Public Distribution System (PDS) is now governed by provisions of the National Food Security Act, 2013 (NFSA)
- This act encompasses the **Midday Meal Program**, the **Integrated Child Development Services Program**, and the Public Distribution System. Furthermore, the NFSA 2013 recognizes maternity benefits.
- The Act provides coverage for **nearly 2/3rd of the country's total population**, based on Census 2011 population estimates.
- **75% of rural and 50% of urban population** is entitled to receive highly subsidized food grains under two categories i.e **Antyodaya Anna Yojana(AAY) households and Priority Households (PHH).**
- Stata/UT wise coverage is determined by the erstwhile Planning Commission which is now **NITI Aayog** on the **basis of the 2011-12 Household Consumption Expenditure Survey of NSSO**. Many states use the Socio-Economic Caste Census (SECC) data for the identification of beneficiaries.
- The Act entitles **35 kg of food grains as per Antyodaya Anna Yojana Households** per month, whereas **5kg of food grains per Priority Households per person.**
- The **eldest woman** of the beneficiary household (18 years or above) is considered '**Head of Family'** for the purpose of issuing ration cards.

6.2 Provisions

- The National Food Security Act of 2013, assigns **joint responsibilities** to the federal and state governments.
- The National Food Security Act of 2013, mandates the **center with the responsibility of allocating and transporting food grains** to designated depots in the states and UTs.

- Furthermore, the center must provide central assistance to states/UTs for the distribution of food grains from authorized FCI godowns to the doorsteps of **Fair Price Shops**.
- States and union territories are responsible for identifying eligible households, issuing ration cards, distributing foodgrain entitlements through fair price shops, licensing and monitoring Fair Price Shop (FPS) dealers, establishing an effective grievance redress mechanism, and strengthening the **Targeted Public Distribution System (TPDS)**.
- The National Food Security Act (2013) also includes provisions for Targeted Public Distribution System reforms, such as **cash transfers for food entitlement provisioning**.
- **Direct Benefit Transfer**, which began in the union territories of Chandigarh and Puducherry, involves the cash equivalent of the subsidy being transferred directly into the bank accounts of eligible households.

6.3 Objectives

- In the human life cycle approach, this Act provides for **food and nutritional security.**
- It ensures that people have access to an **adequate quantity of high-quality food at reasonable prices** so that they can live a dignified life, as well as matters related to or incidental to that.

6.4 Significance

- It is beneficial to the agricultural sector.
- It also helps the government control food prices.
- Because agriculture is a labour-intensive industry, a boost in the agricultural sector would result in more job opportunities.
- This would boost economic growth and lead to a reduction in poverty.
- Access to nutritious food would improve the public's overall health.
- Food security is also important for the nation's global security and stability.
- The right to food is not explicitly mentioned in the Indian Constitution.
- Until the NFSA, the fundamental right to life under Article 21 was interpreted to include the right to live with dignity, which could include the right to food and other basic necessities.

6.5 Impact

- The NFSA, passed in 2013, provides for the distribution of subsidized foodgrains through ration shops to up to 75% of the rural population

and 50% of the urban population, which, according to Census 2011, totals 81.35 crore people.

- NFSA is **currently operational in all states and union territories**, with an intended coverage of 81.35 crore people across the country.
- **In January 2022, 25.26 LMT (Lakh Metric Tonnes) of food grains** were distributed under NFSA to nearly 79 crore beneficiaries.
- Status of NFSA as of Feb 2022:

6.6 Criticism

- The Act fundamentally talks about **hunger and its eradication** but **fails to take into account the evils of under nutrition** and removing the same.
- **Malnutrition** is a major problem faced in India which can't be solved merely through establishing a Public Distribution System. Besides ensuring the supply of food, **measures related to sanitation, health care, and water form an important aspect of the distribution**.
- Thus, the Act should strive to include both, **Right to Food as well Right to Nutrition**.
- The **benefits of Anganwadis are not yet reaching many areas**, and their coverage in many areas is poor. It is a challenge to see how the benefits of the Act would be reaped without sufficient means.
- The Act also faced opposition from the Farmer's Union, contending that the Act **would nationalize agriculture, making the Government buy, sell and hoard** the majority of agricultural production.
- Furthermore, it would **reduce farmers' bargaining power** and minimize the support extended to marginal and small farmers.
- The Act also allows private entities in the supply chain, which allows room for **profit-making and unfair trade practices**. The **leakages and corrupt practices** in the Public Distribution System and supply chain also stand as an obstacle to the efficient functioning of the Act.
- The Act states that the **right to food can't be availed during times of natural calamities** and during times of war. States which are highly prone to natural disasters would not be provided with the right to food when required the most.

- The implementation of this Act is divided into phases, which means it would take longer to achieve and desired objectives.

6.7 Amendments

- An amendment to the **Food Security (Assistance to State Government) Rules, 2015**, has been notified in order to improve transparency and reduce leakages at ration shops during the weighing of food grains for beneficiaries, as well as to encourage **ePoS linkage with electronic weighing machines**, according to an official statement.
- The amendment, notified by the Consumer Affairs, Food, and Public Distribution Ministry, aims to ensure that beneficiaries receive the correct quantity of subsidized food grains under the National Food Security Act (NFSA), 2013, in accordance with their entitlement.
- It also **incentivizes states that have been using ePoS** effectively and encourages states to improve ePoS operational efficiency and generate savings.
- According to the amendment, states that operate their ePoS devices wisely and are able to generate savings from the **additional margin of Rs 17 per quintal** can now use the savings to purchase, operate, and maintain electronic weighing scales and integrate them with point-of-sale devices.

6.8 Conclusion

The National Food Security Act of 2013 is an important step toward addressing the country's food insecurity and hunger, but it should not be the only one. It requires restructuring and the incorporation of new changes in various areas in order to achieve its goal. The effectiveness of the Act's implementation is primarily dependent on the activities of the states, followed by the Centre to help achieve the Sustainable Development Goal of Zero Hunger by 2030.

Chapter 10: Money Supply and Monetary Policy

1. Money

Money is a widely used and accepted **medium of exchange**. It is anything that can be accepted as payment for goods and services or as a means of debt settlement. Money is the **most liquid** (it is easy to sell in the market like gold, silver, and so on) of all assets in the sense that it is universally accepted and thus can be easily exchanged for other commodities. This topic is very important for the UPSC IAS Exam Economy subject.

1.1 Historical Background – How Concept of money Evolved

Barter System

- Money as a **medium of exchange** was not used in early human history since households were self-sufficient and there was little exchange of goods.
- Whatever exchange occurred between the households was done through barter or the exchange of goods for other goods.
- As there was no common unit of account and medium of exchange, the barter system did not allow for direct purchases of goods.
- The problem with a barter system is that in order to obtain a specific good or service from a supplier, one must also have a good or service of equal value that the supplier desires.
- In other words, in a barter system, the exchange can occur only if two transacting parties have a **double coincidence of wants**.
- The likelihood of a double coincidence of wants is quite low and making the exchange of goods and services rather difficult.
- To solve the problems of barter trade, early humans devised a payment and exchange system that allows the direct purchase of goods using any instrument that has the following characteristics:
    - Unit of account
    - High Liquidity
    - Possible to store
    - It must be desired by all (It should have high demand)
    - It is easily exchangeable (Medium of Exchange)

Commodity Money

- In the beginning, there were only a few commodities that were required by everyone.
- Commodities such as **arrows, bows, and seashells**, which are mostly used for hunting, became the first form of medium of exchange and thus acted as money.
- When early humans transitioned from hunting to agriculture in the second stage of evolution, animals such as **cattle, goats, and sheep** became a medium of exchange and acted as money.
- Since commodities have limitations such as a lack of a standard unit of account, limited supply, and natural factors, etc. their use was limited and was eventually replaced by other forms of money.

Metallic Money

- Commodity money evolved into metallic money as human civilization progressed.
- Metals such as **gold, silver, copper**, and others were used because they could be easily handled and quantified. It was the primary form of money for the majority of recorded history.
- With the passage of time and technological advancements, the hard form of gold and silver was replaced by a coinage system (gold and silver coins) that was widely used as money.

Paper Money

- It was discovered that transporting gold and silver coins was both inconvenient and dangerous. As a result, the invention of paper money marked a watershed moment in the evolution of money.
- The country's **central bank** regulates and controls paper money (RBI in India).
- At the moment, a large portion of the money is made up of **currency notes** or paper money issued by the central bank.

Credit Money

- The emergence of credit money occurred almost concurrently with the emergence of paper money.
- People keep a portion of their cash in bank deposits, which they can withdraw at their leisure via cheques.
- The cheque (also known as credit money or **bank money**) is not money in and of itself, but it serves the same functions as money.

Plastic Money

Plastic money, such as **credit and debit cards**, is the most recent type of money. They intend to do away with the need to carry cash when conducting transactions.

Mobile Payments

Mobile payments are payments made for goods or services using a portable electronic device such as a cell phone, smartphone, or tablet.

Money can also be sent to friends and family members using mobile payment technology.

Paytm, PhonePe, Google Pay, and so on are increasingly competing for retailers to accept their platforms for point-of-sale payments.

Parameter	***Barter System***	***Money***
Perishable	Barter goods are perishable, so they cannot be stored for a long time. E.g. Potatoes, rice.	Money is not perishable so it can be stored. It will remain the same for a long time. E.g. Coins and paper currency
Double coincidence of wants	Barter needs double coincidence of wants to initiate a transaction.	Money doesn't need a double coincidence of wants to initiate a transaction.
Divisibility	Divisibility is difficult in barter goods.	Money has high divisibility, money can be divided into small increments that can be used in exchange
Storage cost	Since barter goods are perishable, it has high storage cost.	Comparatively low storage cost due to its compactness and non-perishable nature.
Universal acceptability	Not universally acceptable as needs must match.	Money acts as an acceptable medium of exchange universally.
Deferred payment	Barter transactions are immediate and differed payments are not possible.	Temporary postponements of payment are possible in the case of money.
Convertibility to other Commodities	Convertibility is a very difficult process in barter.	Easy to convert into other commodities or currencies or money types.
Exchangeability	The barter system has poor exchangeability	Money can be exchanged easily with each other and in different forms.
Liquidity	Poor liquidity as it can't be used immediately.	High Liquidity (Easily available and tradable in any market) as it can be used at need.
Unit of Account	Not act as a standard unit of account	Money acts as a standard unit of account.
Fungibility	Less fungible	High fungibility (replaceable by another identical item; mutually interchangeable)

1.2 Types of Money

Type	*Description*
Commodity Money	Commodity money is a physical good with 'intrinsic value' – a use other than money. Alcohol, cocoa beans, copper, gold, silver, salt, seashells, tea, and tobacco are all historical examples. Commodity money has four main characteristics: durable, divisible, easily exchangeable, and rare. Commodity money is distinct in that it is the only type of money with an underlying value. Even though gold is no longer used as a form of money, it still has value as jewellery or gilding.
Fiat Money	Fiat money is a currency issued by the government that is not backed by a commodity such as gold. Since fiat money gives central banks control over how much money is to be printed, they have greater control over the economy. The value of fiat money is determined by the relationship between supply and demand, as well as the stability of the issuing government, rather than by the value of the commodity backing it. When fiat money is backed by a gold or silver standard, it is referred to as "representative money," and when the central bank promises "to pay the bearer the sum of this many rupees," currency is referred to as "anonymous bearer bond with zero interest."
Fiduciary Money	Fiduciary money, also known as currency, refers to banknotes and coins that are in use in the economy. This is the amount of money that economic actors have available to them in order to conduct transactions.
Legal Tender Money	Any form of payment recognized by a government that is used to pay debts or financial obligations, such as tax payments, is considered legal tender. Legal tender laws effectively prohibit the use of anything other than existing legal tender in the economy as money. Legal tender performs the economic functions of money as well as a few other functions, such as making monetary policy and manipulation of currency possible. Meanwhile, some currencies, most notably the US dollar, are considered legal tender in countries that do not issue their own currency. For example, Ecuador, which does not have its own currency, has accepted the US dollar as legal tender since 2000.
Cryptocurrency	A cryptocurrency is a type of digital asset that is based on a network that is distributed across many computers. Because of their decentralized structure, they can exist independently of governments and central authorities. Cryptocurrencies are not widely accepted as money, owing to their lack of legal tender status. El Salvador, on the other hand, became the first country in the world to accept bitcoin as legal tender in June 2021.

1.3 Significance

- It serves as a **medium of exchange**; it can be used to purchase any commodity.
- It serves as a **measure of value** or account of a unit. Every commodity has a monetary value that can be expressed in terms of money.
- It acts as a **store of value**.
- It serves as a standard mode for **deferred payments**. It can be used to settle future monetary obligations. As an example, a loan obtained today is paid back in instalments.
- It is the most liquid of all assets because it is universally accepted and thus easily exchanged for other commodities.
- It also has an opportunity cost. Instead of keeping a specific cash balance, you can earn interest on it by putting it in a fixed deposit with a bank.
- Money provides consumers and businesses with some very basic and practical advantages.
- Money's main advantage is that it increases an economy's efficiency by **lowering transaction cost**s.
- When people can use money instead of bartering, the economy becomes more specialized and has a better division of labor.
- Money facilitates exchange and promotes trade.
- Money provides incentives to people to work hard and satisfy their wants.
- Money helps producers to warn profits and reinvest the profit to generate more income and employment.
- Money in the form of wages increases the productivity of labor in the economy.

1.4 Conclusion

Money has evolved significantly since the days of shells and skins, but its primary function has remained unchanged. Money, in whatever form it takes, provides a medium of exchange for goods and services and allows the economy to grow by allowing transactions to be completed at faster rates.

2. Commodity Money

In an economy, **money** is a type of asset that is used to purchase goods and services from other people. A commodity is a physical item that can be easily exchanged for another of the same type. **Commodity money** is money that is backed by a commodity that has **intrinsic value**. Intrinsic value denotes the value of a commodity even if it is not used as money. People sometimes turn to commodity money instead of the money authorized by their governments during times of economic turmoil, such as severe economic depressions or hyperinflation.

2.1 What is Commodity Money?

- Commodity money is money whose value is derived from the commodity from which it is derived.
- Commodity money is a physical good with **'intrinsic value'** – a use other than money.
- Alcohol, cocoa beans, copper, gold, silver, salt, seashells, tea, and tobacco are all historical examples.
- Commodity money has four main characteristics: **durable, divisible, easily exchangeable, and rare**.
- Commodity money is distinct in that it is the only type of money with an underlying value.
- Even though gold is no longer used as a form of money, it still has value as jewelry or gilding.

2.2 Historical Background

- Commodity money has a long history that spans centuries and millennia. In fact, determining its exact origins is nearly impossible.
- Nonetheless, there are records that show activity between 700 and 500 BC, when gold became a common form of money.
- **Lydian merchants** created electrum, a gold coin mixed with silver, during this time period. Their goal was to help improve the efficiency of international trade.
- It was a useful store of value, it was long-lasting, and it was widely accepted across borders.
- Later, in 550 B.C., by order of **King Croesus of Lydia**, it was fully circulated.

2.3 Features

Durable

- Commodity such as meat would be ineffective because it spoils over time.
- Similarly, metals such as iron will not suffice because they rust easily.
- If the commodity is unable to retain its intrinsic value, trust in it will be short-lived.

Divisible / Measurable

- We must have a standard method of calculating money. The development of measurement units such as ounces and pounds paved the way for this.
- As a result, we are able to purchase a variety of goods at varying prices.
- If we can't measure money then we will not know how much to pay. If there was only a 50 bill in circulation, it would be extremely difficult to buy something for ₹1.
- Easily Exchangeable
- Nobody wants to deal with the hassle of taking a cow to market. It is far more convenient to use gold coins because they are lighter and easier to transport.
- All of the commodities that have historically taken off are easy to trade and convenient.

Rarity

- Commodity money must be rare because the supply is limited. Without it, money can become almost limitless, resulting in massive inflation.
- Nonetheless, the money supply must be able to respond to rising economic output.
- That is, the commodity supply must be able to respond to rising demand.
- As a result, when the economy begins to grow, the commodity must be able to supply and represent new goods on the market.

2.4 Significance

- Commodity money has many supporters who believe it is the best form of money and that we should return to it.
- There are several advantages to using commodity money over fiat money.
- For example, it provides more flexibility for the money holder, more

opportunities to get rich quickly, and more protection from economic inflation.

- The ability of commodity money to serve multiple functions is its primary advantage.
- Gold, for example, can be used to make jewelry and is also used in computer wiring.
- A commodity money holder has several advantages; it can be used or spent.

2.5 Limitations

- **Face Value** was not consistent across the region.
- In general, the commodities used were **perishable.**
- Commodities are typically **heavy to transport**.
- There is no **fungibility** (replacement by another identical item; mutual interchangeability)**.**

2.6 Conclusion

Commodities such as cattle, grains, leather, skins, utensils, and weapons are examples of commodity money. However, commodity money is no longer preferred because it lacks important monetary characteristics such as uniformity, homogeneity, standard size and weight, portability, and divisibility.

3. Fiat Money

Fiat money only has value because people trust it. Governments establish trust by declaring it **legal tender**, allowing all people and businesses to accept it as payment. Governments then outlaw all other forms of money, further cementing trust. The majority of modern economies are based ona fiat money system. **Coins and bills** are examples of fiat money.

3.1 What is Fiat Money?

- Fiat money is a currency issued by the government that is not backed by a commodity such as gold.
- Since fiat money gives central banks control over how much money is to be printed, they have greater control over the economy.
- The value of fiat money is determined by the relationship between supply and demand, as well as the stability of the issuing government, rather than by the value of the commodity backing it.
- When fiat money is backed by a gold or silver standard, it is referred to as **"representative money,"** and when the central bank promises "to pay the bearer the sum of this many rupees," currency is referred to as **"anonymous bearer bond with zero interest."**
- The majority of modern paper currencies, including the US dollar, the euro, and other major global currencies, are fiat currencies.

3.2 Historical Background

- **The term "fiat" is a Latin word that means "it shall be" or "let it be done."**
- The origins of fiat money can be traced back to the 11th century **Chinese Tang dynasty**.
- **By the 12th century, fiat money had spread throughout the country. It was known by several names, including jiaozi, huizi, and guanzi.**
- In his book **The Travels of Marco Polo**, Marco Polo described the Yuan Dynasty's fiat money in the 13th century:
    - "All these pieces of paper are issued with as much solemnity and authority as if they were of pure gold or silver; and on every piece, a variety of officials, whose duty it is, have to write their names and put their seals."

3.3 Significance

- Fiat money has the potential to be more stable than commodities as

a form of money. This is due to a consistent supply provided by the central bank or government – whoever is in charge.

- Since fiat money is not a scarce or fixed resource like gold, central banks have far greater control over its supply, allowing them to manage economic variables like **credit supply, liquidity, interest rates, and money velocity**.
- Fiat money is a good currency if it can perform the functions that a country's economy requires of its monetary unit, such as **storing value**, providing a numerical account, and facilitating exchange.
- It is less expensive to produce than a currency that is directly linked to a commodity.
- Fiat money gives governments more leeway in managing their own currency, setting monetary policy, and stabilizing global markets.
- It also permits **fractional reserve banking**, which allows commercial banks to multiply the amount of money on hand to meet borrowers' demands.

3.4 Limitations

- **Monetary policies** that reduce the value of money result in overprinting of currency, which may result in **hyperinflation**.
- It is still bulky to carry, reducing its movability.
- Theft risk and vulnerability to counterfeit (duplicate/fake currency)
- Money cannot be easily divided into small increments to more precisely match commodity values, which leads to the rounding-off problem.
- For example, due to a change problem, petrol pumps are not returning 60 paise per customer.
- Hyperinflation occurs when inflation rises at an extremely rapid rate. Inflation rates can rise from 50 to 300 times.
- If people lose faith in a country's currency, the money loses its value. This is not the same as a gold-backed currency.
- The **2007 mortgage crisis and subsequent financial meltdown**, on the other hand, tempered the belief that central banks could always prevent depressions or severe recessions by regulating the money supply.
- Due toits unlimited supply, fiat money provides more opportunities for the **creation of bubbles**.

3.5 Conclusion

Fiat currencies have value only because the government maintains it; there is no utility to fiat money in and of itself. Since there is no underlying commodity backing fiat money, it is inconvertible and cannot be redeemed.

4. Fiduciary Money

The value of **fiduciary money** is determined by the expectation that it will be widely accepted as a **medium of exchange**. It is **not declared legal tender** by the government, unlike fiat money, which means that people are not required by law to accept it as a form of payment. Instead, the issuer of fiduciary money agrees to exchange it for a commodity or fiat money if the **bearer requests it**. People can use fiduciary money just like regular fiat or commodity money as long as they are confident that the promise will not be broken. **Cheques, banknotes, and drafts** are examples of fiduciary money.

4.1 What is Fiduciary Money?

- **Fiduciary money** is money that is accepted as a medium of exchange due to the **trust that exists between the payer and the payee**.
- The current monetary system is highly fiduciary. When a bank promises to pay its customers in different types of money and the customer can sell or transfer the promise to someone else, it is referred to as fiduciary money.
- Generally, fiduciary money is paid in gold, silver, or paper money.
- Cheques and bank notes are examples of fiduciary money because they are both tokens that are used as money and have the same value.
- Fiduciary money's value is determined by the expectation that it will be widely accepted as a medium of exchange.
- It is **not declared legal tender by the government**, unlike fiat money, which means that people are **not required by law to accept it as a form of payment**.
- Instead, the issuer of fiduciary money agrees to exchange it for a commodity or fiat money if the bearer requests it.
- People can use fiduciary money just like regular fiat or commodity money as long as they are confident that the promise will not be broken.

4.2 Conclusion

Fiduciary money is accepted on the basis of the trust that its issuer (the bank) commands. Fiat money is the foundation of the majority of modern monetary systems. For the majority of history, however, almost all money was commodity money, such as gold and silver coins.

5. Legal Tender Money

Legal Tender Money is anything recognised by law as a means to settle a public or private debt or meet a financial obligation, including tax payments, contracts, and legal fines or damages, is considered legal tender. In almost every country, the **national currency is legal tender**. A creditor is required by law to accept legal tender as payment for a debt.

5.1 What is Legal Tender Money?

- Any form of payment recognised by a government that is used to pay debts or financial obligations, such as tax payments, is considered legal tender.
- Legal tender laws effectively prohibit the use of anything other than existing legal tender in the economy as money.
- By law, the legal denomination of a country's currency must be accepted as a medium of exchange and payment for a money debt.
- While all denominations of circulating paper money are usually legal tender, the denomination and amount of coins acceptable as legal tender vary by country.
- The **RBI Act of 1934,** which grants the Central Bank the sole authority to issue banknotes, states that **"every banknote shall be legal tender in payment for the amount expressed therein in any place in India."**
- The acceptance or rejection of legal tender status is significant because paper money derives all of its value from the government's acceptance of it.
- **The RBI and the government issue legal tender money in the form of currency notes or coins. When this legal tender status is withdrawn, the process is known as demonetization.**
- Legal tender performs the economic functions of money as well as a few other functions, such as making monetary policy and manipulation of currency possible.
- Meanwhile, some currencies, most notably the US dollar, are considered legal tender in countries that do not issue their own currency.
- For example, **Ecuador**, which does not have its own currency, has accepted the US dollar as legal tender since 2000.

5.2 Types

Limited Legal Tender Money

- This is a type of money that can be used to pay off a debt up to a certain amount, after which a person can refuse to accept the payment and no legal action can be taken against them.
- In India, **coins** are only legal tender in limited quantities.

Unlimited Legal Tender Money

- In this form of money, it is possible to pay off any amount of debt.
- A person who refuses to accept this money may face legal action.
- In India, **paper notes/currency** are unlimited legal tender.

5.3 Significance

- Market participants use it to perform the following functions of money in the economy: **a medium of indirect exchange, a unit of account, a store of value, and a deferred payment standard**.
- Having a legal tender allows for flexibility in the money supply, and using a single currency eliminates the transaction costs associated with using multiple competing currencies.
    - Imposing legal tender is one method of achieving a **single currency**.
- **Monetary policy** is also made possible by legal tender.
- From the standpoint of the issuer, legal tender allows the issuer to manipulate, debase, and devalue the currency in order to obtain **seigniorage** and facilitates the issuance of fiduciary media by the banking system to meet trade needs.
- The revocation of legal tender status is significant because paper money derives all of its value from the government's acceptance of it.

5.4 Limitations

- The loss of a currency's legal tender status can have an impact on citizens' personal finances as well.
- In the short term, it may also disrupt the smooth flow of day-to-day business.
- With many large economies bracing for a full-fledged war on tax evasion, many countries are considering withdrawing legal tender status from their high-value notes.
    - All of this strengthens our case for going cashless and switching to plastic/electronic banking.

5.5 Present Legal Tender in India

- **Currency notes** in the Mahatma Gandhi series in denominations of **Rs.5, Rs.10, Rs.20, Rs.50, Rs.100, Rs.500, and Rs.2, 000** are currently in circulation.
- Furthermore, **coins** with denominations **of 50 paise, Rs 1, Rs 2, Rs 5, and Rs 10** in a variety of sizes, themes, and designs are in circulation.

5.6 Conclusion

In their daily lives, a country or its citizens may use a variety of modes of exchange. According to history, ancient humans used salt and spices as currency. However, 'Legal tender' is money that is recognised by the law of the land as valid for debt payment. It must be accepted in order for the debt to be discharged.

6. Cryptocurrency

A **cryptocurrency** is an internet-based medium of exchange that conducts financial transactions using cryptographic functions. It makes use of **blockchain technology** to achieve **decentralization, transparency, and immutability** (the ability of a block chain ledger to remain unchanged, unaltered, and indelible).

The most important characteristic of a cryptocurrency is that it is not controlled by any central authority – the **decentralized nature** of the blockchain renders cryptocurrencies theoretically immune to traditional methods of government control and interference.

6.1 What is Cryptocurrency?

- A cryptocurrency is a type of **digital asset** that is based on a network that is distributed across many computers.
- Because of their **decentralized structure**, they can exist independently of governments and central authorities.
- **Blockchain and related technology**, according to experts, will disrupt many industries, including finance and law.
- The **benefits** of cryptocurrencies include cheaper and faster money transfers, as well as decentralized systems that do not fail at a single point.
- Cryptocurrency **disadvantages** include price volatility, high energy consumption for mining activities, and use in criminal activities.
- **Cryptocurrencies are not widely accepted as money, owing to their lack of legal tender status.**
- **El Salvador**, on the other hand, became the first country in the world to accept bitcoin as legal tender in June 2021.

6.2 Evolution

- **Bitcoin**, the first decentralized cryptocurrency, was created in 2009 by a presumably anonymous developer named **Satoshi Nakamoto**.
- Subprime mortgage crisis and recession in 2008-2009 resulted in **Quantitative Easing** (the introduction of new money into the money supply by a central bank) of the dollar in the United States, which increased dollar supply and eroded dollar purchasing power.
- Banks charge fees for online transfers, credit card transactions, and ATM withdrawals.
- From the creation of **Bitcoin in 2009** to the present day, cryptocurrencies have grown in popularity all over the world.

- The gains made by this sector since the onset of the Covid-19 pandemic in January 2020 have been astounding; the **"crypto market"** has grown by more than **500%.**

6.3 Bitcoin

- It is an electronic or digital currency that operates on a peer-to-peer basis. It is decentralized, with no centralized authority in charge.
- Bitcoins can be digitally sent to anyone with a bitcoin address anywhere in the world. One person may have multiple addresses for various purposes such as personal, business, and so on.
- Satoshi Nakamoto proposed bitcoin, a mathematically-proofed electronic payment system.
- A bitcoin is not printed currency, but rather a **non-reputable** (assurance that no one can deny the legitimacy of something) record of every transaction that it has been through. All of this is part of a massive ledger known as the blockchain.
- Since no authority controls or tracks the generation of the coins, the system is designed in such a way that the network keeps a foolproof record of every transaction as well as tracking the issuance of the currency sent without either side knowing the identity of the other Bitcoins is 'mined' using computing power in a distributed network.
- It is the first example of a new type of currency known as **cryptocurrency.**

6.4 Concept

- Cryptocurrencies are digital or virtual currencies that rely on cryptographic systems to function.
- They make it possible to make secure online payments without the use of third-party intermediaries.
- The term **"crypto"** refers to the encryption algorithms and cryptographic techniques used to protect these entries, such as elliptical curve encryption, public-private key pairs, and hashing functions.
- Cryptocurrencies can be mined or bought on cryptocurrency exchanges.
- They are also used for cross-border transfers to a limited extent.

6.5 Types

- Bitcoin is still the most traded and covered cryptocurrency.
- Many other cryptocurrencies, known as "altcoins," have been launched

in the aftermath of Bitcoin's success. Some of the well-known altcoins are:

- **Solana**
- **Litecoin**
- **Ethereum**
- **Cardano**
- **Peercoin**
- **Namecoin**

- By November 2021, the total value of all cryptocurrencies in existence had surpassed $2.1 trillion, with Bitcoin accounting for approximately 41% of the total value.

6.6 Legality

- Cryptocurrencies are not backed by any government or private organization. As a result, making a case for their legal status in various financial jurisdictions around the world has been difficult.
- It doesn't help that cryptocurrency has mostly operated outside of most existing financial infrastructure.
- Cryptocurrency's legal status has implications for its use in daily transactions and trading.
- The **Financial Action Task Force (FATF)** recommended in June 2019 that cryptocurrency wire transfers be subject to the requirements of the Travel Rule, which requires AML compliance.
- **El Salvador** is the only country in the world to accept Bitcoin as legal tender for monetary transactions as of December 2021.
- The **Payment Services Act of Japan** declares Bitcoin to be legal property.
- **China** has prohibited cryptocurrency exchanges and mining within its borders.
- In the **European Union**, cryptocurrencies are legal.

6.7 Significance

- Cryptocurrencies represent a new, **decentralized money paradigm**.
- Centralized intermediaries, such as banks and monetary institutions, are not required in this system to enforce trust and police transactions between two parties.
- Thus, a cryptocurrency-based system eliminates the possibility of a single point of failure, such as a large bank, triggering a global crisis,

such as the one triggered in 2008 by the failure of institutions in the United States.

- Cryptocurrencies promise to make it **easier to transfer funds** between two parties without the need for a trusted third party such as a bank or credit card company.
- Cryptocurrency transfers between two transacting parties are faster than traditional money transfers because they do not use third-party intermediaries.
- **Profits** can be made from cryptocurrency investments. The value of cryptocurrency markets has skyrocketed.
- It is a **less expensive** option when compared to other online transactions.
- The transfer of funds is completed with **minimal processing fees**.

6.8 Limitations

- Cryptocurrencies, while claiming to be an anonymous form of transaction, are actually pseudonymous. They leave a **digital trail** that agencies can decipher.
- Cryptocurrencies have grown in popularity among criminals as a tool for nefarious activities such as **money laundering and illegal purchases**.
- Cryptocurrencies have also become popular among hackers, who use them to carry out **ransomware attacks**.
- **In theory, cryptocurrencies are supposed to be decentralized, with their wealth distributed among many parties via a blockchain. In practice, ownership is extremely concentrated.**
- One of the conceits of cryptocurrencies is that anyone with a computer and an internet connection can mine them.
    - Mining popular cryptocurrencies, on the other hand, necessitates a significant amount of energy, sometimes equivalent to that consumed by entire countries.
- While **cryptocurrency blockchains** are extremely secure, other crypto repositories, such as exchanges and wallets, are vulnerable to hacking.
- **Price volatility** affects cryptocurrencies traded on public markets. Bitcoin's value has gone through rapid ups and downs.
- Some economists believe that cryptocurrencies are a passing fad or **speculative bubble**.

6.9 Cryptocurrency in India

- The RBI issued a circular in 2018 prohibiting all banks from dealing

in cryptocurrencies. In May 2020, the Supreme Court ruled that this circular was unconstitutional.

- The government recently announced the introduction of a bill, **Cryptocurrency, and Regulation of Official Digital Currency Bill, 2021,** to create a sovereign digital currency while simultaneously prohibiting all private cryptocurrencies.
- The funds invested in Indian blockchain start-ups account for less than 0.2 percent of the total amount raised by the sector globally.
- The current cryptocurrency approach makes it nearly impossible for blockchain entrepreneurs and investors to gain significant economic benefits.

6.10 Way Forward

- **Regulation** is required to prevent serious problems, to ensure that cryptocurrencies are not misused, and to protect unsuspecting investors from excessive market volatility and potential scams.
- The regulation must be clear, **transparent, and coherent**, and it must be animated by a vision of what it seeks to achieve.
- A legal **and regulatory framework** must define crypto-currencies as securities or other financial instruments under applicable national laws and identify the regulatory authority in charge.
- Rather than outright prohibiting cryptocurrencies, the government should regulate their trading by instituting **stringent KYC norms**, reporting, and taxation.
- To address concerns about transparency, information availability, and consumer protection, steps such as record keeping, inspections, **independent audits, investor grievance redressal,** and dispute resolution may be considered.
- Cryptocurrencies and Blockchain technology have the potential to **rekindle the entrepreneurial spirit in India's startup ecosystem** by creating job opportunities at all levels, from blockchain developers to designers, project managers, business analysts, promoters, and marketers.

6.11 Conclusion

- India is on the verge of the next phase of the **digital revolution**, with the potential to channel its human capital, expertise, and resources into this revolution and emerge as one of its winners.
- All that is required is for policymaking to be done correctly.
- Blockchain and crypto assets will be essential components of the Fourth Industrial Revolution and Indians should not be forced to ignore them.

7. Functions of Money

Economists consider the following as main **functions of money -a medium of exchange, a measure of value, a standard of deferred payment, a store of value, and transfer of value.**

Money is the most widely used medium of exchange. There can be no exchange of commodities and thus no role for money in an economy consisting of only one individual. Even if there are multiple people but none of them participate in market transactions, such as a family living on an isolated island, money serves no purpose for them. However, when more than one economic agent participates in market transactions, money becomes an important instrument for facilitating these exchanges.

7.1 Functions of Money

The functions of money are divided into two categories:

Primary Functions:

It refers to the fundamental or primary functions of money which include:

Medium of Exchange

- It refers to a monetary function in which money is viewed as a means of exchanging goods.
- The medium of exchange function is regarded as the **primary and unique function of money** because it solved the primary problem of the barter system of double coincident wants.
- The condition of **double coincidence of wants** describes the situation in which one person receives the commodity provided by the other person in exchange.
    - A butcher, for example, would not get the cloth unless the weaver did not require meat.
- In this case, it is critical that both parties require the goods that they are receiving from the other. As a result, obtaining the necessary goods was difficult.
- With the introduction of money, however, goods are easily made available without reliance on any other good. This is because money is generally accepted throughout an economy.
- Aside from that, money is regarded as a medium of exchange because it is **easily portable and divisible**, as well as government-authenticated.

Measure of Value

- It refers to a monetary function that aids in determining the value of goods and services. The value of all goods and services is expressed in terms of money.
- When calculating the monetary value of goods and services, money is used as the **common denominator**.
- Money as a measure of value has the following advantages:
  - Aids in the **comparison and calculation of exchange rates** between two goods.
  - Makes accounting systems more meaningful.
  - Aids in calculating and **comparing national incomes** of various countries.
  - Aids in comparing the costs of **production and distribution to the revenue** generated by the consumption of goods and services.

Secondary Functions

It refers to important monetary functions derived from primary functions.

Store of Value

- It refers to a secondary function derived from money's medium of exchange function.
- Individuals typically **keep their wealth in the form of money**. As a result, money functions as an asset that retains its value over time.
- There was only one transaction in the barter system, which was a simultaneous sale and purchase of goods and services.
- In the money economy, however, the sale and purchase are considered two distinct functions.
- It is possible when money serves as **both a medium of exchange and a store of value.**
- For example, an individual's salary is not spent all at once; rather, it is consumed gradually for the purchase of various goods and services.

Standard of Deferred Payments

- It refers to one of money's most important functions. **Loans, salaries, pensions, insurance premiums, interest, and rents** are examples of deferred payments.
- The amount of repaid money must be the same as it was at the time of purchase, which is a necessary condition for deferred payment.
- It was impossible to determine whether the amount returned in the

form of a commodity was the same as it was at the time of purchase in the barter system.

- **For example, the price of a quintal of rice today would not be the same after a year.**
- However, the standard of deferred payment function of money is **not without limitations**, as the value of money has always fluctuated due to **inflation.**

Transfer of Value

- Money's utility extends to the transfer of value because it can be used to purchase goods not only within the country but also beyond its borders.
- Money as a standard tool can be used to sell or buy goods in the domestic or international market.

7.2 Conclusion

Money availability in the market has contributed to market stability and liquidity, as well as helping to form essential functions of money markets. Money facilitates transactions by serving as a widely accepted medium of exchange.

8. Demand for Money and Supply of Money

Money is an asset and thus the **demand for money** exists because the public wants to own it. Of course, the reason for holding money and the time period for which it is held differs from person to person. The total amount of money demanded in an economy is thus the total amount of money demanded by all individuals/households in that economy.

The **supply of money** in an economy at any point in time refers to the amount of money held by households and businesses for transactions and debt settlement. We exclude money held by the government and money held by the commercial banking sector from commonly accepted measures of money supply.

8.1 Demand for Money

- In economics, demand for money is commonly associated with cash or bank demand deposits. In general, the nominal demand for money increases with the level of nominal output and decreases with the nominal interest rate.
- The demand for money is influenced by a variety of factors, including **income level, interest rates, inflation, and future uncertainty.**
- **The impact of these factors on money demand is typically explained in terms of the three motives for demanding money:**
    - **Transaction motive –** It refers to the demand for money to meet the current needs of individuals and businesses.
    - **Precautionary motive –** It refers to people's desire to save money for various contingencies that may arise in the future.
    - **Speculative motive –** It refers to the motivation of individuals to hold cash in order to profit from market movements regarding future changes in the interest rate.
- **Monetary policy** can help to stabilise an economy when the demand for money is stable. When the demand for money is not stable, real and nominal interest rates change, and economic fluctuations occur.
- The demand for money explains people's desire for a specific amount of money.
- Money is required to manage transactions, and the value of the transactions determines how much money people wish to keep.
    - The greater the number of transactions, the greater the amount of money demanded.

- Since the quantity of transactions is determined by earnings, it should be obvious that an increase in earnings leads to an increase in the demand for money.
- When people save their money rather than putting it in a bank where it earns interest, the money they save is also subject to the rate of interest.
- People become less focused on stockpiling money when interest rates rise, because holding money leads to holding less interest-earning deposits. As a result, at high interest rates, the amount of money demanded decreases.

8.2 Supply of Money

- Money supply is a **stock variable**, just like money demand. Money supply refers to the total stock of money in circulation among the general public at any given time.
- The RBI publishes figures for four different measures of money supply, namely **M1, M2, M3, and M4**. They are defined as below:
  - M1 = CU + DD
  - M2 = M1 + Savings deposits with Post Office savings banks
  - M3 = M1 + Net time deposits of commercial banks
  - M4 = M3 + Total deposits with Post Office savings organisations (excluding National Savings Certificates)
- Where, **CU** is public currency (notes and coins) and **DD** is **net demand deposits** held by commercial banks. The term **'net'** implies that only public deposits held by banks are to be included in the money supply.
- Interbank deposits held by a commercial bank in other commercial banks are not considered part of the money supply.
- **M1 and M2** are referred to as **narrow money**. **M3 and M4** are referred to as **broad money.**
- The gradations are listed in decreasing order of liquidity. **M1** is the most liquid and easiest to transact with, whereas **M4** is the least liquid.
- **M3** is the most commonly used money supply measure. It's also referred to as **aggregate monetary resources**.
- **Credit control policies** imposed by a country are banking system aid in determining the total supply of money.
- The money supply is solely determined by the **central bank** and is unaffected by interest rates. As a result, the **money supply curve is vertical** at the quantity of money supply, rather than upward or downward sloping.

- Since the central bank has control over the money supply, it can take actions to increase or decrease the money supply. Changes in the money supply cause interest rates to fluctuate.
- The **monetary base** and the **money multiplier** ultimately determine the money supply.
    - In most countries, the size of the monetary base is determined by the central bank.
    - The monetary base includes vault reserves as well as currency in circulation outside of banks.
    - Central banks may alter reserve requirements in order to alter the monetary base.
- **Monetary policy** has an effect on the money supply as well.
    - **Expansionary policy** raises the total supply of money in the economy faster than usual, while **contractionary policy** raises the total supply of money more slowly than usual.
    - Expansionary policies are used to combat unemployment, whereas contractionary policies are used to slow inflation.

8.3 Conclusion

- The demand for money is the amount of money that is held under various motives.
- It should be remembered that in economics, demand for money refers to the demand for the existing stock of money that is available to be held. It is a stock of money, not a flow of it over time.
- The supply of money in a country is largely determined by the credit control policies pursued by the country's banking system.

9. Demand for Money

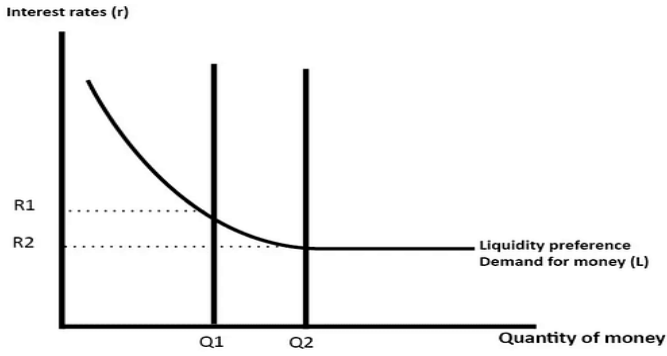
According to Keynes, the **demand for money**, or **liquidity preference** as he referred to it, refers to the desire to hold money. In general, the nominal demand for money increases with the level of the nominal output and decreases with the nominal interest rate. The late **Lord Keynes**, the famous English economist who gave birth to what is now known as **Keynesian Economics**, proposed the modern concept of demand for money.

9.1 What is Demand for Money?

- In economics, demand for money is commonly associated with cash or bank demand deposits. In general, the nominal demand for money increases with the level of the nominal output and decreases with the nominal interest rate.
- The demand for money is influenced by a variety of factors, including **income level, interest rates, inflation, and future uncertainty.**
- **Monetary policy** can help to stabilize an economy when the demand for money is stable. When the demand for money is not stable, real and nominal interest rates change, and economic fluctuations occur.
- The demand for money explains people's desire for a specific amount of money.
- Money is required to manage transactions, and the value of the transactions determines how much money people wish to keep.
- The greater the number of transactions, the greater the amount of money demanded.
- Since the quantity of transactions is determined by earnings, it should be obvious that an increase in earnings leads to an increase in the demand for money.
- When people save their money rather than putting it in a bank where it earns interest, the money they save is also subject to the rate of interest.
- People become less focused on stockpiling money when interest rates rise because holding money leads to holding less interest-earning deposits. As a result, at high-interest rates, the amount of money demanded decreases.3.2 Motives for Demanding Money

Transaction Motive

- **It refers to the demand for money to meet the current needs of individuals and businesses.**



- Individuals require money to meet their immediate needs, which are referred to as the **income motive**.
- **Businesses, on the other hand, require money to carry out their operations, which is known as the business motive.**

Income Motive

- It refers to the motivation of individuals who seek money in order to **meet their own and their family's needs.** In general, people keep cash to bridge the gap between their income and their expenses.
- The income is received once a month, but the expenses are incurred on a daily basis. As a result, some income must be held in order to make current payments.
- The holding amount is determined by an **individual's income** and the frequency with which he or she receives income.

Business Motive

- It refers to the need for **money in liquid form by businesses** to meet their current needs.
- Businesses require funds to purchase raw materials and pay transportation costs, as well as wages, salaries, and other expenses.
- The amount of money demanded by businesses is determined by their **turnover**. The higher the turnover, the greater the need for additional funds to cover expenses.

Precautionary Motive

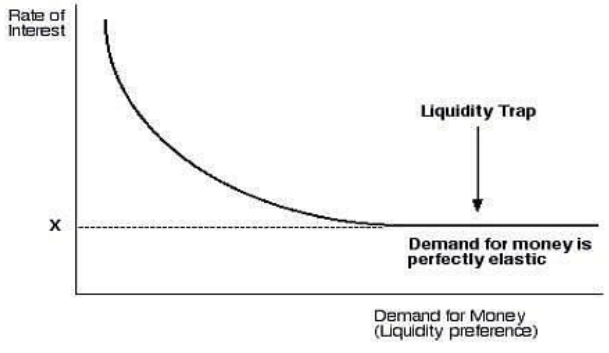
- It refers to people's desire to **save money for various contingencies** that may arise in the future.
- **Unemployment, sickness, and accidents** are examples of contingencies.
- The amount of money required for the precautionary motive is determined by a person's nature and living conditions.

Speculative Motive

- The speculative motive for demanding money arises when **holding money is perceived to be less risky** than lending the money or investing it in another asset.
- It refers to the motivation of individuals to hold cash in order to profit from market movements regarding changes in future interest rates.
- For example, if a stock market crash appeared to be imminent, the speculative motive for demanding money would come into play; those anticipating a crash would sell their stocks and keep the proceeds as money.
- The precautionary and speculative motives serve as a store of value for various purposes.

Liquidity Trap

- The demand for money is a decreasing function of the rate of interest.
- Higher the rate of interest, lower the demand for money for speculative motives and less money would be kept as an inactive balance and vice versa.
- Money demand is perfectly elastic in a **liquidity trap.**
- Increasing the money supply has no effect on interest rates, and it has no effect on increasing demand.
- At a low rate of interest, people will hold money as an inactive balance which is called a liquidity trap.
- The expansion of the money supply gets trapped and cannot affect rate of interest and the level of investment.
- However, the demand for money does not depend so much upon the current rate of interest as on expectations about changes in the rate of interest.



9.3 Factors Affecting Demand for Money

Interest Rates

- The amount of money people keep in reserve to pay for transactions and to meet precautionary and speculative demand is likely to vary with the interest rates they can earn on alternative assets such as bonds.
- People hold less money when interest rates rise relative to the rates available on money deposits.
- People hold more money when interest rates fall.
- The logic of these conclusions about money and interest rates is dependent on people's motivations for holding money.

Technological Changes

- Technological changes such as debit cards make the importance of holding cashless important.
- People who have easy access to current accounts may be able to keep less cash on hand.
- The transaction motive drives the demand for money (we want money so we can buy things).
- We keep less money on hand when new technologies make it easier to convert wealth into money.

Availability of Credit

If credit becomes more widely available, precautionary demand for money will fall as people believe they can borrow – even if they face short-term difficulties.

Irrational Behavior of Asset Prices

- Markets can go through booms and busts as a result of psychological factors such as over-exuberance.
- During these bubble periods, demand for assets rises while demand for holding money falls.

Changes in National Income

- When real GDP rises, more goods and services are available for purchase. They will cost more money to purchase.
- A fall in real GDP, on the other hand, will cause the money demand curve to fall.

Changes in the Price Level (inflation or deflation)

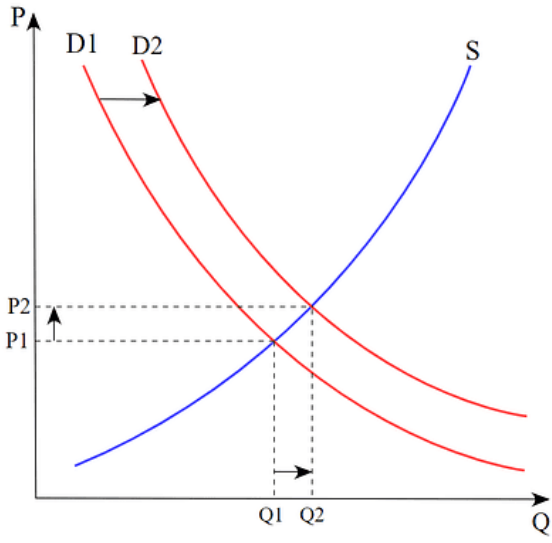
- If the price of everything increases by 20%, you will need 20% more money to buy things. When the price level rises, the demand for money rises as well.
- In contrast, when the price level falls, so does the demand for money.

9.4 Demand Curve for Money

- The money demand curve depicts the amount of money demanded at each interest rate, while all other variables remain constant.
- A rise in interest rates reduces the amount of money demanded. A decrease in interest rates raises the amount of money demanded.
- A shift in the money demand curve occurs when any non-price determinant of demand changes, resulting in a new demand curve.

9.5 Factors Causing a Shift in Demand

- The vertical axis (y) of a demand curve is the price, and the horizontal axis is the quantity (x).
- When any non-price determinant of demand changes, the money demand curve shifts, resulting in a new demand curve.
- Changes in non-price determinants cause demand to change even if prices remain constant. **Prices are influenced by a variety of factors, such as:**
  - Variations in **disposable income**
  - Variations in taste and preference
  - Variations in expectations
  - Variations in the price of related goods
  - Size of the population
- **Factors influencing demand include:**
  - Price reduction for a substitute
  - Increase in the price of a supplement
  - Reduce in consumer income if the good is a standard good
  - Increase in consumer income if the goods are of poor quality.
- When the nominal level of output rises, so does the demand for money. It moves in tandem with the nominal interest rate.



Shift of the Demand Curve: The graph shows both the supply and demand curve, with quantity of money on the x-axis (Q) and the price of money as interest rates on the y-axis (P). When the quantity of money demanded increase, the price of money (interest rates) also increases, and causes the demand curve to increase and shift to the right. A decrease in demand would shift the curve to the left.

9.6 Implications of Demand Curve Shift

- Money demand results from the trade-off between the liquidity advantage of holding money and the interest advantage of holding other assets.
- Money demand determines how a person's wealth should be held.
- When the demand curve shifts to the right and rises, the demand for money rises, and people are more likely to save money. The level of nominal output has risen, and there is a liquidity benefit to holding money.
- Similarly, a shift to the left in the demand curve indicates a decrease in the demand for money.
- As the nominal interest rate falls, there is a greater interest advantage in holding other assets rather than money.

9.7 Conclusion

The demand for money is affected by the price level, interest rate, and real GDP. These three factors combine to determine how much of a person's wealth is held in cash and how much is held in interest-bearing assets.

10. Supply of Money

The total amount of money (in any form) held by a community in a given period of time is referred to as the **supply of money**. It is a **stock and share concept** that is usually perceived in terms of the cumulative effect of the amount of currency that citizens have and the demand deposits available with a country's banks.

Money supply data is collected and published because it influences the **price level, inflation, the exchange rate, and the business cycle.**

Understanding the fundamentals of money supply and money demand can help you gain a better understanding of the country's financial situation and the currency's volatility.

10.1 What is Supply of Money?

- The total stock of money circulating in an economy is referred to as the **supply of money.**
- In layman's terms, it is defined as **currency in circulation plus deposits in commercial banks**.
- The supply of Money consists of the following:
  - The total currency circulating in the public
  - **Non-bank deposits** with a commercial bank
- **Currency in circulation is** the total value of all currency (coins and paper currency) issued by the Reserve Bank of India minus the amount withdrawn by it. It is a significant **liability on a central bank's balance sheet**.
- Currency in circulation (currency with the public) includes the following:
  - Currency notes and coins with the public
  - Cash in hands with banks
- Money supply plays a crucial role in the determination of price level and interest rates.
- The growth of the money supply helps in the acceleration of economic development and price stability.
- **Credit control policies** imposed by a country are banking system aid in determining the total supply of money.
- The **monetary base** and the **money multiplier** ultimately determine the money supply.
- **Monetary policy** has an effect on the money supply as well.

- **The expansionary policy** raises the total supply of money in the economy faster than usual, while **contractionary policy** raises the total supply of money more slowly than usual.
- Expansionary policies are used to combat unemployment, whereas contractionary policies are used to slow inflation.

10.2 Effects of Money Supply on Economy

- The money supply, or total cash present in a country's economy, is bound to have an impact on market economics. As a result, any change in the demand and supply of money will cause a change in the market.
- A rise in the money supply will be reflected in lower interest rates and prices of commodities and service.
- A decrease in the money supply will result in higher interest rates and prices, with a corresponding increase in bank reserves.
- A similar effect occurs in the business. As the price level falls due to increased money supply, the business output will rise to accommodate people's increased spending.
- As a result, the money supply and money demand have a direct impact on the macroeconomics of a country's market.

10.3 Components

Currency

- Currency is a significant component of a country's money supply. As previously stated, the government issues currency in two forms: **coins and paper currency**. As a result, the money supply via currency can also be divided into:
  - **Paper Currency/Notes** - The government and the Reserve Bank of India have control over the production of currency notes. The government produces only one-rupee paper currency in the country, while the RBI produces all other currency notes.
  - **Coins** - Coins, India's second form of currency, are produced in two varieties: token coins and standard coins, also known as **full-bodied coins**. Under the current currency system, full-bodied currency coins have little value. The token coins have a face value of 50 paise and25 paise.

Demand Deposits

- **Demand deposits are a type of commercial bank deposit that serves as a non-confidential fund.**

- When a country's economy includes these accounts, they are considered money.
- The working mechanism of such deposits is similar to that of a checking account, where withdrawals from the fund can be made without notice.

10.4 Measures

- The RBI publishes figures for four different measures of money supply, namely **M1, M2, M3, and M4**. They are defined as below:
  - M1 = CU + DD
  - M2 = M1 + Savings deposits with Post Office savings banks
  - M3 = M1 + Net time deposits of commercial banks
  - M4 = M3 + Total deposits with Post Office savings organizations (excluding National Savings Certificates)
- where **CU** is public currency (notes and coins) and **DD** is **net demand deposits** held by commercial banks. The term **'net'** implies that only public deposits held by banks are to be included in the money supply.
- **M1 and M2** are referred to as **narrow money**.
- **M3 and M4** are referred to as **broad money.**
- **M1** is the most liquid and easiest to transact with, whereas **M4** is the least liquid.
- **M3** is the most commonly used money supply measure. It's also referred to as **aggregate monetary resources**.

10.5 Reserve Money (M0)

- Reserve money is also referred to as **central bank money, monetary base money, base money, or high-powered money.**
- Reserve money is all of the cash in the economy and is denoted by **M0**.
- It includes the following components:
  - Currency with the public
  - Other Deposits with the RBI
  - Banks' cash reserves held with themselves
  - Banks' cash reserves held with the RBI
- Cash Reserves are classified into two types: **Required Reserves (RR)** and **Excess Reserves (ER)**.
  - RR is the reserves that banks are legally required to keep with the RBI.
  - Excess Reserves are all reserves in excess of RR.

- ER is held by banks, whereas RR is held by the RBI.
- Banks hold the ER to cover currency drains, i.e., currency withdrawals by depositors.

10.6 Factors Affecting Money supply

Monetary Base

- When the **reserve moneychangers, the money supply changes** in the same direction. This means that as more reserve money enters the system, the money supply expands and vice versa.
- In most countries, the **size of the monetary base** is determined by the central bank.
- The monetary base includes **vault reserves** as well as currency in circulation outside of banks.
- Central banks may alter reserve requirements in order to alter the monetary base.

Money Multiplier

- A money multiplier is a method of demonstrating the maximum amount of broad money that commercial banks could create for a given fixed amount of base money and reserve ratio.
- The **Money Multiplier is the ratio of Narrow Money (M1) or Broad Money (M3) to Reserve Money.**

10.7 Supply Curve of Money

- The money supply curve depicts the relationship between the **quantity of money supplied** and the **market interest rate**, with all other supply determinants remaining constant.
- The money supply is solely determined by the **central bank** and is unaffected by interest rates.
- As a result, the **money supply curve is vertical** at the quantity of money supply, rather than upward or downward sloping.
- Since the central bank has control over the money supply, it can take actions to increase or decrease the money supply. Changes in the money supply cause interest rates to fluctuate.

10.8 Conclusion

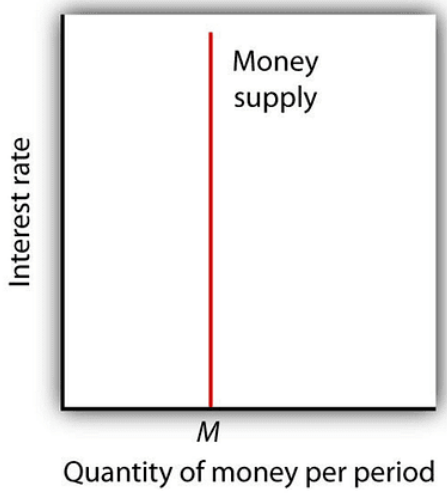
Money supply has a significant impact on a country's economy. The inflation of commodity prices, as well as their demand and supply, alter the supply of money. In economics, the money supply influences interest rates and cash flow throughout the country.

11. Money Creation by Banking System

Banks and money are inextricably linked. In our economy, the majority of the **money creation by banking system** is done in the form of **bank deposits**. It's not just that the majority of money is held in bank accounts. Through the **process of making loans**, the banking system can literally create money. Every new loan made by a bank generates new money. While this is often difficult to believe at first, it is common knowledge among those in charge of the banking system.

11.1 What is Money Creation by Banking System?

- Banks can lend money because they do not expect all investors and depositors to withdraw their funds at the same time.
- When a bank lends money to someone, a new deposit is opened in that person's name. As a result, the money supply expands to include both old and new deposits (plus currency).
- Let's look at an example. Assume there is only one bank in the country. Let's create a fictitious balance sheet for this bank only. The balance sheet is a record of an enterprise's assets and liabilities.
- Traditionally, assets are recorded on the left side of the balance sheet, while liabilities are recorded on the right.
- Accounting rules require that both sides of the balance sheet be equal and tally, or that total assets equal total liabilities.
- **Assets** are items that a company owns or has the right to claim from others. A bank's assets, aside from buildings and furniture, are the loans



it makes to the public. When a bank makes a 1,000 loan to a person, this is the bank's claim on that person for 1,000.

- **Reserves** are another type of asset that a bank has. Reserves are commercial banks' deposits with the Central Bank, the **Reserve Bank of India (RBI),** and its cash.
  - These reserves are kept partly in cash and partly in the form of **financial instruments** issued by the RBI, such as **bonds** and **treasury bills.**
- Reserves are similar to the deposits we make at banks. We keep deposits, and these deposits are our assets, which we can withdraw. Similarly, commercial banks such as the State Bank of India (SBI) maintain their deposits with RBI which are called reserves.

Assets = Reserves + Loans

- Any business's liabilities are its debts or what it owes to others. The main liability of a bank is the deposits that people keep with it.

Liabilities = Deposits

- According to the accounting rule, both sides of the account must balance. As a result, if assets exceed liabilities, they are recorded on the right-hand side as **Net Worth**.

Net Worth = Assets - Liabilities

11.2 Financial Intermediation

- The ability of banks to create money distinguishes them from other financial intermediaries.
- Financial markets play an important role in transferring surplus reserves from households that save some of their income for the future to households and firms that want to borrow to buy investment (capital) goods for future production.
- **Financial intermediation** refers to the process of transferring funds from savers to borrowers.
- Only banks have the legal authority to create assets that are part of the money supply, such as deposits withdrawable by cheque, among all financial intermediaries, including the stock market, bond market, investment companies, and mutual funds.
- This means that banks are the only financial institutions that have a direct impact on the money supply.

11.3 Money Creation *vs* Wealth Creation

- Without a doubt, the **fractional-reserve banking system** generates money. However, it does not generate wealth.

- When a bank lends a portion of its excess reserves, it provides borrowers with the ability to conduct transactions and, as a result, increases the country's money supply.
- However, because the borrowers also have a debt obligation to the bank, the loan does not make them richer.
- This simply means that the banking system's creation of money **increases the economy's liquidity rather than its wealth.**

11.4 Determinants of Money Creation

Excess Reserves

- The total amount of excess reserve held by the banking system as a whole per period determines banks' credit-creating capacity.
- The amount of deposit created is proportional to the amount of excess reserve.

Reserve Ratio

- The maximum amount of credit that banks can create is also determined by the reserve ratio maintained by the banking system as a whole.
- If the central bank raises the minimum-reserve ratio, the total amount of deposits created by the banking system falls. The opposite is also true.

Banking Habits of People

- The credit-creating capacity of commercial banks is also affected by people's banking habits.
- People's banking habits are well-developed in industrialised countries, and the majority of transactions are settled with cheques.
- Obviously, commercial banks' credit-creating capacity is greater in such countries.
- The opposite is true in developing countries such as India. Banking services are not available in the majority of rural areas, where 70% of the population lives. Furthermore, the banking habits are also underdeveloped in such countries.
- In fact, the prevalence of the barter system and a lack of monetisation in the majority of developing Asian, Latin American, and African countries obstructs multiple credit expansion by the banking system.

Availability of Collateral Securities

- Banks typically require securities in exchange for making loans.
- If borrowers do not have enough acceptable securities to offer, the total amount of deposits created by the banking system will be small.

- Even if banks are eager to lend, they are unable to increase their loan volume.

Existing Business Conditions

- The amount of credit that the banking system as a whole can create is determined by the state of the economy or, more specifically, by current business conditions.
- When the economy grows, there is more demand for goods and services. Profit prospects will be favourable as a result.
- As a result, business people will be eager to produce more so that they can sell more. As a result, they will take out more loans, increasing the demand for bank loans. This will make it profitable for banks to increase their credit volume.
- Banks, on the other hand, cannot create much credit if the economy is in a slump. It is because there will be little demand for bank loans during these times.
- Expansion of Banking System
- The total amount of credit that banks can create is determined by the country's banking system's expansion.
- The credit-creating capacity of banks will be high if the banking system is well-developed and there are many banks in the country.
- It is because the total amount of credit that the banking system as a whole can create is a multiple of the banking system's total excess reserves.
- However, in the system, a single (monopoly) bank cannot create credit (deposits) that exceeds its own excess reserve.

Legal Reserves

- If the legal reserve is 10% but commercial banks keep 20% reserve, the deposit (credit) multiplier is 5, not 10.
- Thus, if a bank's cash deposit increases by, say, Rs. 1,000, the total increase in bank deposit at the end will be only Rs. 5,000, not Rs. 10,000.

Cash Leakage

- Banks will have less cash if depositors withdraw a certain amount of money for spending (transactions).
- As a result, as people's transaction demand for money rises, so will the amount of cash held by the non-bank public.
- This will reduce commercial banks' credit-creation capacity.

11.5 Credit Creation by Commercial Banks

- By making new loans, **commercial banks** generate money in the form of bank deposits.
- When a bank makes a loan, such as to someone taking out a mortgage to buy a house, it does not usually do so by handing over thousands of rupees in banknotes.
- Instead, it credits their bank account with a bank deposit equal to the mortgage amount. New money is created at that point.
- Commercial banks' ability to create credit is determined not only by their own cash requirements, but also by the cash requirements of the public or non-banking system.
- Their own cash requirement is primarily determined by the central bank's monetary (credit) policy.
- In order to slow the economy and control inflation, the central bank frequently limits money supply growth.
- However, the public's cash requirement is determined by transaction demand for money, i.e., the amount of money people require for spending.

11.6 Conditions Essential for Credit Creation

The following conditions must be met in order for credit to be created in an economy.

- **Public willingness** to deposit money in commercial banks.
- **Commercial banks' willingness** to lend money to individuals or businesses in the form of credit.
- **Individuals' or businesses' willingness** to seek money from commercial banks in the form of credit.

11.7 Flipside

- The flip side of this money creation is that with each new loan comes a new debt.
- This is where our mountain of personal debt stems from: not borrowing from someone else's life savings, but money created out of thin air by banks.

11.8 Conclusion

Money can be created because there are multiple banks in the financial system; they are only required to hold a fraction of their deposits, and loans end up deposited in other banks, increasing deposits and, thus, the money supply.

12. Monetary Policy

Monetary policy is a process implemented by the **central bank** to manage the **money supply** in order to achieve specific goals such as **limiting inflation, maintaining an appropriate exchange rate, creating jobs, and promoting economic growth**. Monetary policy entails changing interest rates, either directly or indirectly, through open market operations, reserve requirements, or foreign exchange trading.

Credit policy is a subset of monetary policy because it governs how much and at what interest rate banks extend credit.

Historically, in India, monetary policy was announced twice a year, once during the **slack season (April-September)** and once during the **busy season (October-March),** in accordance with agricultural cycles. However, because monetary policy has become more dynamic, the **Reserve Bank of India** decided to issue **bi-monthly Monetary Policy Statements**—once every two months—beginning in 2014, as recommended by the **Urjit Patel Committee**.

12.1 Types of Monetary Policy

Monetary policy is of the following two types:

- **Expansionary policy** – It increases the total supply of money in the economy by easing its availability by lowering interest rates. It is used to stimulate economic growth.
- **Contractionary policy** – It decreases the total supply of money in the economy by raising interest rates. It is used to reduce prices caused by an excess of money supply.

12.2 Objective of Monetary Policy

- Monetary policy is concerned with making money available to the market at reasonable rates and in sufficient quantities at the appropriate time in order to achieve:
  - **Price stability**
  - **Accelerating growth of economy**
  - **Exchange rate stabilization**
  - **Balancing savings and investment**
  - **Generating employment**
  - **Financial stability**
- The primary goal of monetary policy is to maintain price stability while keeping growth in mind. Price stability is a prerequisite for long-term growth.

- In order to maintain price stability, inflation must be kept under control.
- Every five years, the Indian government sets an inflation target. The Reserve Bank of India (RBI) plays an important role in the consultation process for inflation targeting. The current **inflation-targeting framework** in India is flexible.

12.3 How does the RBI get its Mandate to conduct Monetary Policy?

- The Reserve Bank of India (RBI) is charged with implementing monetary policy. The **Reserve Bank of India Act of 1934** expressly mandates this responsibility.
- **There have recently been many changes in the way India's monetary policy is formed, with the introduction of the Monetary Policy Framework (MPF), Monetary Policy Committee (MPC), and Monetary Policy Process (MPP).**

12.4 Monetary Policy Framework (MPF)

- While the Government of India establishes the **Flexible Inflation Targeting Framework in India,** the Reserve Bank of India (RBI) is in charge of the country's Monetary Policy Framework.
- The amended RBI Act explicitly gives the Reserve Bank the **legislative mandate** to run the country's monetary policy framework.
- The framework aims to set the **policy (repo) rate** based on an assessment of the current and evolving macroeconomic situation, as well as to modulate liquidity conditions in order to anchor money market rates at or near the repo rate.
- Changes in repo rates are transmitted through the money market to the entire financial system, influencing aggregate demand – a key determinant of inflation and growth.
- Once the repo rate is announced, the Reserve Bank's operating framework envisions day-to-day liquidity management through appropriate actions aimed at anchoring the operating target - the **weighted average call rate (WACR)** – around the repo rate.

12.5 Monetary Policy Committee (MPC)

- The **Monetary Policy Committee** now determines the policy interest rate required to achieve the inflation target in India.
- The MPC is a six-person committee appointed by the Central Government (**Section 45ZB of the amended RBI Act, 1934**).
- The MPC must meet at least **four times per year**. The MPC meeting requires a quorum of four members. Each MPC member has one vote, and in the event of a tie, the **Governor** has a **second or casting vote**.

- Following the conclusion of each MPC meeting, the resolution adopted by the MPC is published.
- The Reserve Bank is required to publish a document called the **Monetary Policy Report** once every six months to explain:
  - the sources of inflation; and
  - the forecast of inflation for the next 6-18 months.

12.6 Monetary Policy Instruments

Monetary policy is implemented using a variety of direct and indirect instruments.

Repo Rate

The (fixed) interest rate at which the Reserve Bank provides overnight liquidity to banks in exchange for the government and other approved securities as collateral under the liquidity adjustment facility (LAF).

Reverse Repo Rate

The (fixed) interest rate at which the Reserve Bank absorbs liquidity from banks on an overnight basis in exchange for eligible government securities under the LAF.

Liquidity Adjustment Facility (LAF)

- The LAF is made up of both overnight and term repo auctions.
- The Reserve Bank has gradually increased the proportion of liquidity injected through fine-tuning variable rate repo auctions of various tenors.
- The goal of the term repo is to help develop the inter-bank term money market, which in turn can set market-based benchmarks for loan and deposit pricing and thus improve monetary policy transmission.
- The Reserve Bank also conducts variable interest rate reverse repo auctions as market conditions dictate.

Marginal Standing Facility (MSF)

- A facility through which scheduled commercial banks can borrow an additional amount of overnight money from the Reserve Bank by dipping into their **Statutory Liquidity Ratio (SLR)** portfolio up to a certain limit at a penal rate of interest.
- This acts as a safety valve for the banking system in the event of unexpected liquidity shocks.

Corridor

The corridor for the daily movement in the weighted average call money rate is determined by the MSF rate and the reverse repo rate.

Bank Rate

- It is the rate at which the Reserve Bank is willing to purchase or rediscount bills of exchange or other commercial papers.
- Section 49 of the **Reserve Bank of India Act, 1934** mandates the publication of the Bank Rate.
- This rate has been aligned with the MSF rate and, as a result, changes automatically when the MSF rate and the policy repo rate change.

Cash Reserve Ratio (CRR)

The average daily balance that a bank is required to maintain with the Reserve Bank as a share of such percentage of its **Net demand and time liabilities (NDTL)** as specified by the Reserve Bank in the Gazette of India from time to time.

Statutory Liquidity Ratio (SLR)

- The percentage of NDTL that a bank must keep in safe and liquid assets such as unencumbered government securities, cash, and gold.
- SLR changes frequently have an impact on the availability of resources in the banking system for lending to the private sector.

Open Market Operations (OMOs)

These include the outright purchase and sale of government securities for the purpose of injecting and absorbing long-term liquidity, respectively.

Market Stabilisation Scheme (MSS)

- This monetary management tool was introduced in 2004.
- Short-term government securities and treasury bills are sold to absorb longer-term surplus liquidity resulting from large capital inflows.
- The money raised in this manner is kept in a separate government account of the Reserve Bank.

12.7 Conclusion

Monetary policy refers to the use of monetary instruments controlled by the central bank to regulate magnitudes such as interest rates, money supply, and credit availability in order to achieve the ultimate goal of economic policy.

13. Goals of Monetary Policy

It is stated in the Preamble of the **Reserve Bank of India Act 1934** that, the primary **goal of the monetary policy** is to **maintain price stability** while keeping in mind the **objective of growth**. Price stability in other words can be called **inflation targeting**. Monetary policy is an important topic for UPSC IAS Exam Prelims and General Studies Paper 3.

13.1 What is Monetary Policy?

- Monetary policy refers to a collection of activities that a country's central bank can take to control the entire money supply and achieve long-term economic growth.
- Monetary policy can be broadly categorised into - **Expansionary or contractionary monetary policy.**
- Interest rates can be raised or lowered, cash can be directly lent to banks, and bank reserve requirements can be changed.

13.2 Goals of Monetary Policy

- The primary goal of monetary policy is to **maintain price stability while still pursuing the goal of economic growth**. Price stability is a critical prerequisite for long-term growth.
- The Reserve Bank of India (RBI) Act, 1934 was revised in May 2016 to give a **legal basis for the flexible inflation targeting framework's implementation.**
- The amended RBI Act also mandates that the government of India, in collaboration with the Reserve Bank, **determine the inflation target once every five years.**
- As a result, the Central Government published a notice in the Official Gazette setting a **target of 4% Consumer Price Index (CPI) inflation** for the period August 5, 2016 to March 31, 2021, **with a 6% upper tolerance limit and a 2% lower tolerance limit.**
- The Central Government retained the inflation target and tolerance band for the following 5-year period – **April 1, 2021 to March 31, 2026** – on March 31, 2021.
- The following issues have been identified by the central government as contributing to the inability to meet the inflation target:
    1. For any three consecutive quarters, average inflation exceeds the inflation target's upper tolerance level; or
    2. For any three consecutive quarters, average inflation falls below the lower tolerance level.

- Prior to the May 2016 change to the RBI Act, the flexible inflation targeting framework was controlled by a February 20, 2015 Monetary Policy Framework Agreement between the Government and the Reserve Bank of India.

13.3 Other Goals of Monetary Policy

- **Promotion of saving and investment:** A higher rate of interest means more opportunities for investment and savings, ensuring a healthy cash flow in the economy.
- **Managing business cycles:** A business cycle has two primary stages: **boom and depression.** By regulating credit to manage the availability of money, monetary policy is the most effective weapon for controlling the boom and bust of business cycles.
- **Controlling imports and exports:** Monetary policy assists export-oriented units in substituting imports and increasing exports by assisting them in obtaining a loan at a lower interest rate. As a result, the state of the balance of payments improves.
- **Aggregate demand regulation:** When credit is expanded and interest rates are lowered, more people are able to get loans for the purchase of goods and services.
- **Employment Generation:** Small and medium companies (SMEs) can readily obtain a loan for business expansion because to the monetary policy's ability to cut interest rates. This could result in more job chances.
- **Helping infrastructure development:** The monetary policy allows for concessional funding for infrastructure development within the country.

14.4 Tools to achieve the goals of Monetary Policy

- The Reserve Bank of India in its **Bi-monthly Monetary Policy Review meeting** changes the monetary policy tools according to the prevailing inflation and economic situation.
- For instance, **due to the COVID-19 situation** present in the country in March 2020, the RBI took an accommodative stance and **reduced Repo Rate by 75 basis points from 5.15% to 4.40%**.
    - It also **reduced reverse repo rate from 4.9% to 4.00%** and **Marginal Standing Facility rate from 5.40% to 4.65%** to boost consumption.
- Some important tools are:
    - Liquidity Adjustment Facility
        - Repo Rate

- Reverse Repo Rate
- Marginal Standing Facility Rate (MSF) or Bank Rate
- Cash Reserve Ratio (CRR)
- Statutory Liquidity Ratio (SLR)

13.5 Conclusion

The Reserve Bank of India has successfully maintained its primary goal of inflation targeting in the first five years of the statutory agreement with the government by altering the instruments of monetary policy accordingly.

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