

PART- A: INTRODUCTORY MACROECONOMICS

CHAPTER-1

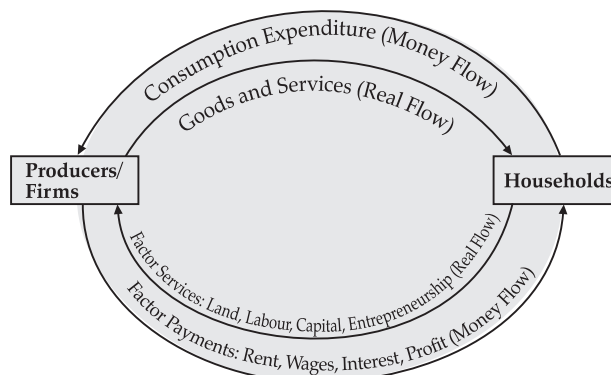
NATIONAL INCOME AND RELATED AGGREGATES

Revision Notes

Macroeconomics with Basic Concepts and Circular Flow of Income

- Macroeconomics refers to that branch of economics that deals with economic problems or economic issues at the level of an economy as a whole, e.g. it deals with aggregates like national income, general price level, etc.
- **Consumption Goods:** Goods which are used by the consumers to satisfy human wants directly are called Consumption Goods.
- **Capital Goods:** All goods which are used in the production of other goods either as fixed assets or as inventory/ stock are called Capital Goods.
- **Final Goods:** Those goods which are purchased either for final consumption by consumers (consumers goods) or for investment by producers (capital goods) are called Final Goods.
- **Intermediate Goods:** Those goods and services which are purchased as raw material for further production or for resale in the same year are called Intermediate Goods.
- **Stock:** Stock is a quantity measurable at a particular “point of time”, e.g. wealth, assets, money, inventory, etc. A stock variable is nothing but an accumulated sum of flows.
- **Flow:** Flow is a quantity that can be measured over a specific “period of time”, e.g. national income, change in stock, etc.
- **Gross Investment:** Total addition made to physical stock of capital during a period of time. It includes depreciation. It is also known as Gross Capital Formation.
- **Net Investment:** Net addition made to the real stock of capital after making adjustment for wear and tear, obsolescence, etc. during a period of time.
- **Depreciation:** It means fall in value of fixed capital goods due to normal wear and tear, expected obsolescence and efflux of time.
- **Circular Flow of Income:** Circular flow of income refers to the flow of activities of production, income generation and expenditure involving different sectors of the economy.
- **2-Sector Model of Circular Flow:** It is assumed that:
 - Domestic economy comprises only 2 sectors, the producers and the households.
 - The households spend their entire income, so that there is no savings.
 - Domestic economy is a closed economy (no exports and imports).
 - There is no government in the economy.
- Production in the producing sector generates income for the households who are owners of the factors of production. Expenditure by the households generates demand for further production. These movements keep chasing each other continuously moving in a circle.

2-Sector Circular Flow Model





If you rearrange the letters used in 'Economics', you get 'Comic Nose'.

➤ **Significance of Circular Flow of Income:**

- (i) It reflects structure of an economy.
- (ii) It shows interdependence among different sectors.
- (iii) It shows injections and leakages from flow of money.
- (iv) It helps in estimation of national income and related aggregates.

National Income Accounting

- **National Income:** National Income is the sum total of factor incomes earned by normal residents of a country.
- **Measurement of National Income:** In every economy, the circular flow of production, income and expenditure remains in operation continuously due to economic activities. Production generates income which creates demand and hence, expenditure. In this way, the national income of a country may be measured by three alternative methods. These are:
 - (a) In the form of flow of goods and services, (b) In the form of income flow, (c) In the form of expenditure flow.
- **Value Added Method or Production Method:** Product Method or Valued Added Method is the method which measures the national income by estimating the contribution of each producing enterprise to produce in the domestic territory of the country in an accounting year. For measuring national income by this method, we have to estimate the following components:
 - **Net Domestic Product at Market Price (NDP_{MP}):** Gross Valued Added [by Primary Sector + Secondary Sector + Tertiary Sector] – Depreciation.
 - **Net National Product at Factor Cost (NNP_{FC}) or NI:** NDP_{MP} – Net Indirect Tax + Net Income from Abroad
 - **Value Added Method (Product Method):** Gross Value Added at Market Price (GVA_{MP}) = Sales + Change in Stock – Intermediate Consumption.

$$GDP_{MP} = GVA_{MP} \text{ of all sectors} + \text{Depreciation} + \text{Net Indirect Taxes}$$
 OR

$$\text{Value of output} - \text{Intermediate consumption}$$

$$NVA_{FC} = GVA_{MP} - \text{Depreciation} - \text{Net Indirect Taxes (NIT)}$$
- **Precautions while using Value Added Method:**
 - (i) The value of intermediate goods should not be included.
 - (ii) Purchase and sale of second hand goods should not be included.
 - (iii) Imputed or estimated value of self-consumed goods should be included but self-consumed services should not be included.
 - (iv) Own account production should be included.
 - (v) Commission earned on account of sale and purchase of second hand goods is included.
- **Income Method:** It measures national income in term of payments made in the form of wages, rent, interest and profit to the primary factors of production, *i.e.*, labour, land, capital and enterprise respectively for their productive services in an accounting year.
- **Net Domestic Income or Net Domestic Product at Factor Cost:** Compensation to Employees + Operating Surplus + Mixed Income from Self Employment.
National Income = Compensation to Employees + Operating Surplus + Mixed Income from Self Employment + Net Income from Abroad.
- **Precautions while using Income Method:**
 - (i) Income from illegal activities like smuggling, theft, gambling, etc., should not be included.
 - (ii) Imputed rent of owner occupied structure and value of production for self-consumption is included but value of self-consumed services like those of housewife is not included.
 - (iii) Brokerage on the sale/purchase of shares and bonds is to be included.
 - (iv) Income in terms of windfall gains should not be included.
 - (v) Transfer earning like old age pensions, unemployment allowances, scholarships, pocket expenses, etc., should not be included.
- **Expenditure Method:** By this method, the total sum of expenditures on the purchase of final goods and services produced during an accounting year within an economy is estimated to obtain the value of GDP.
- **Final Expenditure:** It is the expenditure on the purchase of final goods and services, during an accounting year. It is broadly classified into four categories:
 - (i) Private final consumption expenditure
 - (ii) Government final consumption expenditure

- (iii) Investment expenditure
- (iv) Net exports, *i.e.*, difference between exports and imports during an accounting year
- **Computation of National Income (by expenditure method):** $NNP_{FC} = GDP_{MP} - \text{Depreciation} + NFIA - \text{Net Indirect Tax}$. Where, $GDP_{MP} = \text{Private Final Consumption Expenditure} + \text{Government Final Consumption Expenditure} + \text{Gross Domestic Capital Formation} + \text{Net Exports (Exports - Imports)}$. Where, $\text{Gross Domestic Capital Formation} = \text{Gross Domestic Fixed Capital Formation} + \text{Change in Stock (Closing Stock - Opening Stock)}$
- **Precautions while using Expenditure Method:**
- Only final expenditure is to be taken into account to avoid error of double counting.
 - Expenditure on second hand goods is not to be included.
 - Expenditure on transfer payments by the government is not to be included.
 - Imputed value of expenditure on goods produced for self consumption should be taken into account.
 - Expenditure on shares and bonds is not to be included in total expenditure.
- **Gross Domestic Product (GDP):** It is the total value of all the final goods and services by all the enterprises (both resident and non-resident) within the domestic territory of a country in a particular year.
- **Gross Domestic Product at Market Price (GDP_{MP}):** $\text{Private Final Consumption Expenditure (C)} + \text{Government Final Consumption Expenditure (G)} + \text{Investment Expenditure (I)}$ or $\text{Gross Capital Formation} + \text{Net Exports (X-M)}$.
- Net Domestic Product at Market Price (NDP_{MP}) = $GDP_{MP} - \text{Depreciation}$
- Net Domestic Product at Factor Cost (NDP_{FC}) = $GDP_{MP} - \text{Indirect Taxes} + \text{Subsidies}$
- National Income = $GDP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes} + \text{Net Income from Abroad}$
- **Nominal Gross Domestic Product:** When the goods and services are produced by all producing units in the domestic territory of a country during an accounting year and valued at current year's prices or current prices, it is called Nominal GDP or GDP at current prices. It is influenced by change in both physical output and price level. It is not considered a true indicator of economic development.
- **Real Gross Domestic Product:** When the goods and services are produced by all producing units in the domestic territory of a country during an accounting year and valued at base year's prices or constant price, it is called real GDP or GDP at constant prices. It changes only by change in physical output not by change in price level. It is called a true indicator of economic development.
- **Gross National Product:** It is defined as the total value of all final goods and services produced in a country in a particular year, plus the income which is earned by its citizens who are located abroad and minus the income of non-residents located within the country.
- $GNP_{MP} = GDP_{MP} + \text{Net Factor Income from Abroad}$
- **Net National Product at Factor Cost (NNP_{FC}):** It is the sum total of factor incomes (rent + interest + profits + wages) earned by normal residents of a country during the period of an accounting year. It is also known as National Income.
- $NNP_{FC} = GNP_{FC} - \text{Depreciation}$
- OR
- $NNP_{FC} = NDP_{FC} + NFIA$
- **Net National Product at Market Price (NNP_{MP}):** It refers to market value of final goods and services produced during the year inclusive of Net Factor Income from Abroad but exclusive of depreciation.
- $NNP_{MP} = GDP_{MP} - \text{Depreciation} + NFIA$



Economist are armed and dangerous, watch out are "Invisible Hands".

GDP & Welfare

- **GDP and Welfare:** In general, Real GDP and Welfare are directly related with each other. A higher GDP implies more production of goods and services. It means more availability of goods and services. But more goods and services may not necessarily indicate that the people were better off during the year. In other words, a higher GDP may not necessarily mean higher welfare of the people.
- **Welfare** means material well being of the people. It depends on many economic factors like national income, consumption level, quantity of goods, etc., and non-economic factors like environmental pollution, law and order, etc. The welfare which depends on economic factors is called economic welfare and the welfare which depends on non-economic factor is called non-economic welfare. The sum total of economic and non-economic welfare is called social welfare.

- **GDP is not an appropriate indicator for Welfare:** GDP may be a good indicator of economic growth but not of economic welfare or economic development because of:
 - (a) **Externalities:** Externalities refer to benefits or harms of an activity caused by a firm or an individual, for which they are not paid or penalized. For example, environmental pollution caused by industrial plants is a negative externality and building a flyover is a positive externality.
 - (b) **Composition of GDP:** GDP does not exhibit the structure of the product. If the increase in GDP is mainly due to increased production of war equipment and ammunitions, then such an increase cannot improve welfare in economy.
 - (c) **Distribution of GDP:** When GDP is unevenly distributed, increase in GDP does not increase welfare.
 - (d) **Non-monetary exchanges:** Many activities in an economy are not evaluated in monetary terms, they are not included in GDP, due to non availability of data. However, such activities influence the economic welfare of people of the economy.



Mnemonics

(i) Value Added Method

PST and **Denit** discussed about **GDP of MP.**

P : Gross Value added by **Primary Sector**

S : Gross Value added by **Secondary Sector**

T : Gross Value added by **Tertiary Sector**

De : Depreciation

nit : Net Indirect Taxes

(ii) Net Domestic Income or Net Domestic Product at Factor Cost

CM of **Orrisa** dictated to **NIA** deptt.

C : Compensation of Employees

M : Mixed Income of Self-employed

Orrisa : Operating Surplus

NIA : Net Income from Abroad

(iii) Importance of Management

Students of **GIC** College decorated **X-mas** tree.

G : Government Expenditure

I : Investment Expenditure

C : Consumption Expenditure (Private)

X-mas : Export - Imports

Know the Terms

- **Real Flow:** It shows the flow of goods and services among the various sectors of economy.
- **Money Flow:** It shows the flow of money among various sectors of economy.
- **Leakages of Income:** It is the amount of money which is withdrawn from circular flow of income.
- **Injections of Income:** It is the amount of money which is added to the circular flow of income.
- **Net Factor Income from Abroad (NFIA):** This is the difference between the income earned from abroad for rendering factor services by the normal residents of the country to the rest of the world and the income paid for the factor services rendered by non-residents in the domestic territory of a country.
- **Factor Income:** These are incomes received by the owners of factors of production for rendering their factor services to the producers.
- **Transfer Payments:** These are all those unilateral payments corresponding to which there is no value addition in the economy, e.g., gifts, donations, etc.
- **Domestic Territory:** Domestic or Economic territory is the geographical territory administered by a government within which persons, goods and capital circulate freely.
- **Normal Residents:** A resident (or a normal resident) of a country is a person or institution who ordinarily resides in a country and whose centre of interest also lies in that particular country.
- **Market Price:** It is the price at which a commodity is sold and purchased in the market.

- **Factor Cost:** It refers to all factor payments made by the producing units (firms) to the factors of production involved in the production of goods and services.
- **Value Added:** Means additions in value by each firm in the process of production at each stage.
- **Double Counting:** Counting the value of the same product more than once in calculation of National Income.
- **Mixed Income of the Self-Employed:** It includes both the profits earned on business in which you are employed as well as the stipulated wage for the labour put in by you to yourself.
- **Negative Externalities:** The activity done by the firm or an individual which causes harm.
- **Positive Externalities:** The activity done by the firm or an individual which benefits.



CHAPTER-2

DETERMINATION OF INCOME AND EMPLOYMENT

Revision Notes

Aggregate Demand and Saving

- **Aggregate Demand:** Aggregate Demand refers to the total demand for all goods and services in the economic system as a whole. This is expressed in terms of Total Expenditure made in the economy.
- **Constituents of Aggregate Demand (AD):** In an open economy, constituents of AD are:
 - (i) Consumption Expenditure
 - (ii) Investment Expenditure
 - (iii) Government Expenditure
 - (iv) Net Exports
$$AD = C + I + G + (X - M)$$
- **Private Consumption Expenditure:** The total demand for all goods and services by the household in an economy during an accounting year is termed as Private Consumption Expenditure. It is determined by the level of personal disposable income of the economy.
- **Private Investment Expenditure:** The expenditure of households and private investor to purchase goods or services that adds to their stock of capital is termed as Private Investment Expenditure. It mainly depends on market rate of interest.
- **Government Expenditure:** It includes the total expenditure of government on the purchase of consumption goods and investment expenditure. There is a significant difference between government and private investment. Private investments are done on consideration of profit and termed as Induced Investment.
- **Autonomous Investment:** Government investment expenditure done on considerations of social welfare like construction of roads, schools dams and flyover are termed as Autonomous Investment.
- **Aggregate Supply:** The concept of aggregate supply is related to the total supply of goods and services made available by all the producers in the economy. It can be expressed in three forms:
 - (i) Money value of goods and services produced during a year in an economy, i.e., National Income.
 - (ii) In the form of total income, i.e., consumption + saving.
 - (iii) In the form of minimum income which the firm will receive as sale proceeds from the sale of goods and services.
- **Effective Demand:** It signifies the point where aggregate demand equals to aggregate supply. Thus, that level where aggregate demand equals aggregate supply is called Effective Demand.
- **Consumption Function:** The relationship between consumption and income is Consumption Function.

$$C = f(Y)$$

- **Algebraic Expression of Consumption Function:** The algebraic expression of consumption function is given by:

$$C = \bar{C} + b(Y)$$

where,

C = Consumption

\bar{C} = Minimum Level of Consumption at Zero Income

b = Marginal Propensity to Consume

Y = Income

- **Propensity to Consume:** It expresses the consumption levels at different levels of income.
- **Average Propensity to Consume (APC):** It is the ratio of Consumption Expenditure to any particular level of income.

$$APC = \frac{(C) \text{ Consumption}}{(Y) \text{ Income}}$$

- **Marginal Propensity to Consume (MPC):** It is the ratio of a change in Consumption to a change in Income.

$$MPC = \frac{\text{Change in Consumption}}{\text{Change in Income}} = \frac{\Delta C}{\Delta Y}$$

- **Propensity to Save:** It is the ratio of saving to income at different levels of income.
- **Saving Function:** It denotes the relation between saving and income. It shows the desire of savings at various levels of income.

$$S = f(Y)$$

- **Algebraic Expression of Saving Function:** The algebraic expression of saving function is given by:

$$S = (-) \bar{S} + b(Y)$$

where,

S = Saving

\bar{S} = Level of saving when Income is Zero

b = Marginal Propensity to Save

Y = Income

- **Average Propensity to Save (APS):** It is the ratio of saving to income.

$$APS = \frac{\text{Saving}}{\text{Income}} = \frac{S}{Y}$$

- **Marginal Propensity to Save (MPS):** It is the ratio of change in saving to a change in income.

$$MPS = \frac{\text{Change in Saving}}{\text{Change in Income}} = \frac{\Delta C}{\Delta Y}$$

- **Relationship between Propensity to Save and Propensity to Consume:**

$$MPC + MPS = 1$$

or

$$MPC = 1 - MPS$$

or

$$MPS = 1 - MPC$$

$$APC + APS = 1$$

$$APC = 1 - APS$$

$$APS = 1 - APC$$

- **Investment:** Investment expenditure includes expenditure for producer's durable equipment, new construction and the change in inventories.
- **Induced Investment:** It depends upon income and profit in the economy. Investment made with expectation of profit is called induced investment. It depends upon (i) Marginal efficiency of capital, and (ii) rate of interest.
- **Autonomous Investment:** This investment is independent of income and employment. Such investment is made by the government with the motive of social welfare.
- **Equilibrium Volume of Investment:** Investment decisions depend upon the relative superiority of MEC over rate of interest.
 - MEC = r [Passive Effect on Investment or Neutral]
 - MEC > r [Favourable effect on Investment]
 - MEC < r [Adverse effect on Investment]

Short Run Equilibrium Output

- **Multiplier:** It establishes relation between income and investment. It measures the change in income due to change in investment.

$$K = \frac{\Delta Y}{\Delta I} = \frac{\text{Change in Income}}{\text{Change in Investment}}$$

- **Relationship between Multiplier and Marginal Propensity to Consume (MPC):** The size of multiplier is determined by the Marginal Propensity to Consume. There is a direct relation between MPC and K. Higher the MPC, higher is the value of K and vice-versa.

$$K =$$

and

$$K = \frac{1}{MPS}$$

if

$$MPC = \text{Zero}$$

$$K = 1$$

$$MPC = 1$$

$$K = \infty$$

Value of K lies between 1 and infinity.

- **Forward and Backward action of multiplier:** Multiplier is two-edge instrument and hence, it works in both directions.
- (i) **Forward Action:** Additional investment creates additional income many more times.
- (ii) **Backward Action:** Withdrawal of investment decreases income many more times.

Investment Multiplier and Its Working

- **Short Run:** According to J. M. Keynes, “A period of time during which level of output is determined exclusively by the level of employment in the economy, is termed as short run.”
- **Full Employment:** It refers to a situation, where all those workers who are able to work and willing to work get employment at prevailing wage rate.
- **In an Economy:**
Income Equilibrium Level = Output Equilibrium Level = Employment Equilibrium Level
(Y) (O) (N)
- Short Run Equilibrium, i.e., Keynesian Approach
- $$AD = AS$$
- (i) Employment is determined at a point where $AD = AS$.
- (ii) If $AD > AS$, firm will employ more factors of production and it will again attain $AD = AS$.
- (iii) If $AD < AS$, firm will cut employment and it will bring again $AD = AS$.
- **Change in Equilibrium:** Equilibrium position described above may be of full employment or may not be of full employment. It only determines the level of income. Therefore, for full employment we have to twist AD or AS. But AS depends on technological factors therefore if AD increases, it will raise the level of employment.
- $$S = I$$
- According to Keynes income-employment equilibrium is determined at a point where $S = I$.
- (i) If $S > I$ then equilibrium income will have a tendency to reduce.
- (ii) If $S < I$ then equilibrium income will have a tendency to increase.



Mnemonics

(i) Constituents of Aggregate Demand

Andhra Pradesh Cannot Import Good Nuts

A : Aggregate Demand

C : Consumption Expenditure

I : Investment Expenditure

G : Government Expenditure

N : Net Exports

(ii) Equilibrium Level
India Out performing Economy
I : Income Equilibrium Level O : Output Equilibrium Level E : Employment Equilibrium Level
(iii) Investment Multiplier
Korea Charges Culprit
K : Investment Multiplier C : Change in Income C : Change in Investment

Know the Terms

- **Marginal Efficiency of Capital (MEC):** Marginal efficiency of capital is expected rate of return on an additional unit of capital goods over its cost.

$$MEC = \frac{\text{Prospective Yield}}{\text{Cost (Supply Price of Capital)}}$$

- **Prospective Yield:** Prospective Yield of an asset is the aggregate net return expected from that capital asset during its whole life-time.
- **Supply Price:** The expenditure made on capital goods at the time of initial investment is known as Supply Price.
- **Rate of Interest:** Interest is the reward for parting with liquidity for a specified period.
- **Ex-Ante Saving:** It is the planned or desired or intended saving during a particular period.
- **Ex-Ante Investment:** It is the planned or desired or intended investment during a particular period.
- **Ex-Post Saving:** It is realised saving. It is equal to Ex-Ante saving + Unplanned saving.
- **Ex-Post Investment:** It is realised investment. It is equal to Ex-Ante investment + unplanned investment.
- **Full Employment:** It refers to situation in which all those who are able to work and are willing to work get employment at the existing wage rate.
- **Involuntary Unemployment:** It is a situation when some people are not getting jobs even when they are able to work and are willing to work at the existing wage rate.
- **Voluntary Employment:** When people are not willing to work at the prevailing wage rate. It is not counted as under-employment.
- **Investment multiplier:** It is the ratio between change in income and change in investment.
- **Multiplier Process:** Change in investment leads to increase in income which causes increase in consumption which becomes somebody's income again.

□□

CHAPTER-3

PROBLEMS AND MEASURES OF EXCESS AND DEFICIENT DEMAND

Revision Notes

Problems of Deficient and Excess Demand

- **Deficient Demand:** When AD falls short of AS at full employment, it is called deficient demand.
Deficient Demand = AD < AS (at full employment level).

- **Reasons for Deficient Demand:**
 - (i) Reduction in supply of currency
 - (ii) Increase in Bank Rate
 - (iii) Increase in Taxes
 - (iv) Reduction in Public Expenditure
 - (v) Increase in Propensity to Save
 - (vi) Decline in Export Demand
- **Effects of Deficient Demand:**
 - (i) Fall in production level
 - (ii) Fall in price level
 - (iii) Increase in unemployment.
- **Excess Demand:** Excess demand refers to a situation when aggregate demand exceeds aggregate supply corresponding to full employment. $AD > AS$ (at full employment level).
- **Reasons for Excess Demand:**
 - (i) Increase in public expenditure
 - (ii) Reduction in taxes
 - (iii) Deficit financing
 - (iv) Extension of credit facilities
 - (v) Increase in investment demand
 - (vi) Increase in propensity to consume
 - (vii) Increase in export demand.
- **Effects of Excess Demand:**
 - (i) Decrease in unemployment
 - (ii) Increase in production level
 - (iii) Increase in price level.
- **Cyclical Fluctuations:** In real life, Aggregate demand does not match Aggregate Supply. Consequently, economy faces economic fluctuations like:
Depression → Recovery → Full employment → Propensity → Recession → Again depression and process goes on.

Measures to Correct Deficient and Excess Demand

- **There are four important ways to correct Excess and Deficient Demand:**
 - (i) Fiscal Policy
 - (ii) Monetary Policy
 - (iii) Foreign Trade Policy
 - (iv) Other Measures
- **Fiscal Policy:** Government measures related to public expenditure, taxation and public debt are referred as fiscal measures and the policy related to these measures is called Fiscal Policy.
- **Instruments of Fiscal Policy:** Public expenditure, taxation, public debt and deficit financing.
- **Monetary Policy:** A policy, which controls the money supply, credit availability and its cost is termed as monetary policy. Central Bank of the country frames this policy and ensures its execution.
- **Measures of Monetary Policy:**
 - (i) **Quantitative:** Bank Rate, Open Market Operations, Minimum Reserve Ratio and Liquidity Ratio.
 - (ii) **Qualitative:** Margin requirement of loans, Rationing of credit, Direct action and Moral pressure.



Mnemonics

(i) Reasons for Deficient Demand

Rajasthan Is India's Richest In Desserts.

- R** : Reduction in supply of currency
- I** : Increase in Bank Rate
- I** : Increase in Taxes

<p>R : Reduction in Public Expenditure I : Increase in Propensity to Save D : Decline in Export Demand</p>
<p>(ii) Effects of Deficient Demand</p> <p>Finland and France are In Europe</p> <p>F : Fall in production level F : Fall in price level I : Increase in unemployment</p>
<p>(iii) Reasons for Excess Demand</p> <p>India Reaching Denmark Easily In Innovation is an Interesting thing</p> <p>I : Increase in public expenditure R : Reduction in taxes D : Deficit financing E : Extension of credit facilities I : Increase in investment demand I : Increase in propensity to consume I : Increase in export demand</p>
<p>(iv) Effects of Deficient Demand</p> <p>Dehradun Is an Indian valley city</p> <p>D : Decrease in unemployment I : Increase in production level I : Increase in price level</p>
<p>(v) Qualitative Monetary Policy Measures</p> <p>Mr. BR purchased OMO Mall of Mr. LR</p> <p>BR : Bank Rate OMO: Open Market Operations M : Minimum Reserve Ratio LR : Liquidity Ratio</p>
<p>(vi) Qualitative Monetary Policy Measures</p> <p>Madhav Ran Directly to his Mother</p> <p>M : Margin requirement of loans R : Rationing of credit D : Direct action M : Moral pressure</p>

Know the Terms

- **Taxes:** The type of surcharge that the government imposes on the income and goods.
- **Unemployment:** The situation where the able persons who are willing to work are not employed.
- **Depression:** Employment, income, and output begin to decline sharply in the economic fluctuation.
- **Public Expenditure:** The expenditure done by the government on the development of various infrastructural projects.
- **Public Debt:** The loan taken by the government from the general public or from the foreign financial institutions.
- **Deficit Financing:** The budgetary situation where expenditure is higher than the revenue.



PART- B: INDIAN ECONOMIC DEVELOPMENT

CHAPTER-4 CURRENT CHALLENGES FACING INDIAN ECONOMY

Revision Notes

Employment

- **Employment:** Employment is an indicator of that situation in which worker is engaged in some productive activity for earning his living.
- **Labour Supply:** It refers to the amount of labour that are willing to offer work corresponding to a particular wage rate.

$$\text{Participation Rate} = \frac{\text{Total Work Force}}{\text{Total Size of Population}} \times 100$$

➤ Types of Labour:

- (i) **Self-Employed Labour:** An arrangement in which a worker uses his own resources to make a living is known as self-employed. He owns and operates an enterprise to earn his livelihood.
- (ii) **Hired-Workers:** Those people who are hired by others on paid wages or salaries as a reward for their services are called hired workers. Hired workers can be of two types:
 - (a) **Casual Workers:** Those people who are not hired by their employers on a regular or permanent basis and do not get social security benefits are called casual workers.
 - (b) **Regular Workers:** This type of workers are hired on permanent basis by the employer.

➤ Size of work force in India:

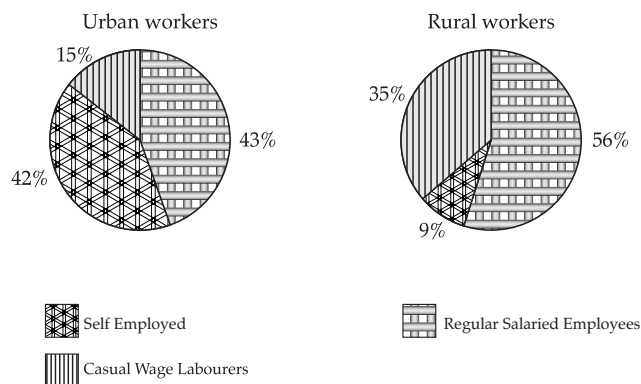
Work-Population Ratio in India, 2011-2012

Sex	Worker-Population Ratio (2011-2012)		
	Total	Rural	Urban
Men	54.4	54.3	54.6
Women	29.9	24.8	14.7
Total	38.6	59.9	35.5

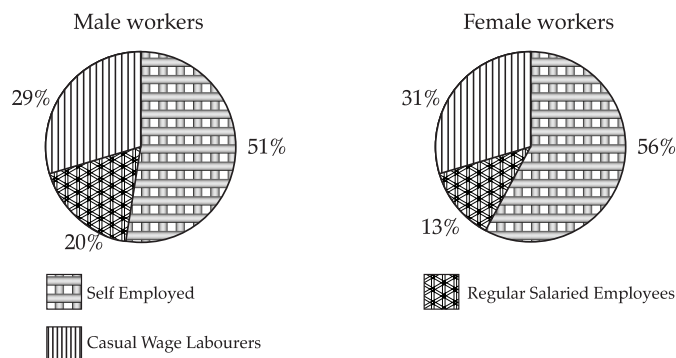
Distribution of Workforce by Industry, 2011-2012

Industrial Category	Place of Residence		Sex		Total
	Rural	Urban	Men	Women	
Primary Sector	66.6	9	43.6	62.8	48.9
Secondary Sector	17.0	31	25.9	20.0	24.3
Tertiary/Service Sector	16.4	60	30.5	17.2	26.3
Total	100.0	100.0	100.0	100.0	100.0

Distribution of Employment by Region



Distribution of Employment of Gender



➤ **Participation Rate:** Aggregate participation rate in India is approx. 39%. In Urban areas this rate is 36 percent while in rural it is approximately 40 percent.

➤ **Trends in Employment Pattern (Sector-wise and Status-wise), 1972-2019 (in %)**

Item	1972-73	1983	1993-94	1999-2000	2011-2012	2018-2019
Sector						
Primary	74.3	68.6	64	60.4	48.9	43
Secondary	10.9	11.5	16	15.8	24.3	25
Services	14.8	16.9	20	23.8	26.8	32
Total	100.0	100.0	100.0	100.0	100.0	100
Status						
Self-employed	61.4	57.3	54.6	52.6	52.0	44.9
Regular Salaried Employees	15.4	13.8	13.6	14.6	18.0	22.1
Casual Wage Labourers	23.2	28.9	31.8	32.8	30.0	33
Total	100.0	100.0	100.0	100.0	100.0	100

➤ **Jobless Growth:** If economic growth is driven by better technology but it fails to improve the rate of participation in economy, such a growth is called 'Jobless Growth'.

Workers in Formal/Informal Sector, 2009-2012

Sector	Male (million)	Female (million)
Formal	24	6
Informal	310	133
Total	334	139

➤ **What is Unemployment:** Unemployment means a situation in which a person willing to work and able to work does not get employment at the prevailing wage rate.

➤ **Nature of unemployment in India:** In rural areas, open and disguised unemployment and in urban areas industrial, educated and technological unemployment are common.

➤ **Adverse Effects of Unemployment:**

- (i) **Economic Mal-effects:**
 - (a) Waste of human power
 - (b) Decrease in economic disparity

- (c) Industrial conflict
- (d) Increase in poverty
- (e) Adverse effect on capital formation
- (ii) **Social and Political effects:**
 - (a) Creation of social problems
 - (b) Exploitation of labour
 - (c) High inequality
 - (d) Political instability
- **Causes of Unemployment in India:**
 - (i) **General Causes:**
 - (a) Rapid increase in population
 - (b) Slow pace of development
 - (c) Inadequate economic planning
 - (ii) **Specific Causes:**
 - (a) Seasonal Nature of Agriculture
 - (b) Increase in Pressure of population
 - (c) Shortage of Capital
 - (d) Social Status
 - (e) Shortage of Secondary Education
- **Measures to Eradicate Unemployment in India:**
 - General Measures:**
 - (i) Control of population
 - (ii) Increase in investment rate
 - (iii) Manpower planning
 - (iv) Employment oriented planning
 - (v) Social reforms
 - (vi) Development of entrepreneurs qualities
 - Specific Measures:**
 - (i) **Rural Unemployment:**
 - (a) Encouragement to rural industrialisation
 - (b) Institution changes in agriculture
 - (c) Employment oriented planning in villages
 - (d) Encouragement to multiple cropping in agriculture
 - (ii) **Urban Unemployment:**
 - (a) Fuller utilisation of production capacity
 - (b) Encouragement to small industries
 - (c) Practical form of Education
- **Government Measures to solve unemployment—**
 - (i) **General:**
 - (a) Population control
 - (b) Reforms in education policy
 - (c) Diversification of farm activities
 - (d) Development of village and small industries
 - (ii) **Special Measures:** Employment generation programmes, e.g., Mahatma Gandhi National Rural Employment Guarantee Act, 2005.



Anyone who believes exponential growth can go on forever in a finite world is either a MADMAN OR ECONOMIST.

Infrastructure

- **Introduction:** Infrastructure increases the productivity of productive resources and raises the standard of living and economic development of the country. All those factors like-energy, transport, communication,

school, colleges, hospitals, etc. which are the basis of economic and social development of human are termed as infrastructure.

- **Concept of Infrastructure:** Infrastructure refers to the basic supporting structure which is built to provide different kinds of services in an economy. These services include roads, railways, ports, airports, dams, power stations, oil and gas pipelines, telecommunication facilities, schools and colleges, health system including clean drinking water facilities, banks, insurance and other financial institutions.
- **Types of Infrastructure**
 - (i) **Economic Infrastructure:** It refers to all such elements of economic change (like power, transport, communication and monetary system) which serve as a support system to the process of economic growth
 - (ii) **Social Infrastructure:** It refers to all such elements which help in human capital formation, e.g., health, education, housing, etc.
- **Importance of Infrastructure in economic development:**
 - (i) Raises productivity
 - (ii) Provides employment
 - (iii) Induced foreign investment
 - (iv) Enhances ability to work
 - (v) Facilitates outsourcing
 - (vi) Raises size of market
 - (vii) Raises economic development
- **State of Infrastructure in India:** India invests only 34 percent of its GDP in infrastructure.
- **Health:** It does not mean only absence of disease but to raise ability to work.
- **Health Infrastructure in India:** Expenditure on health sector is only 4.7% of the total GDP.

Public Health Infrastructure in India, 1951-2017

Items	1951	1981	2000	2017
Hospitals (Govt.)	2,694	6,805	15,888	23,582
Beds(Govt.)	1,17,000	5,04,538	7,19,861	7,10,761
Dispensaries	6,600	16,745	23,065	27,698
PHCs	725	9,115	22,842	25,650
Sub-centres	-	84,736	1,37,311	1,56,231
CHCs	-	761	3,043	5,624

Sources: National Commission on Macroeconomics and Health. Ministry of Health and Family Welfare. Government of India, New Delhi. 2005.

- **Health services after Independence:**
 - (i) Decline in death rate
 - (ii) Reduction in infant mortality rate
 - (iii) Rise in expectancy of life
 - (iv) Control over deadly diseases
 - (v) Reduction in child mortality rate
 - (vi) Role of private sector
 - (vii) Medical tourism
 - (viii) Role of community and non-profit organisations.
- **Indian System of Medicine (ISM):** AYUSH
A = Ayurveda, Y = Yoga and Naturopathy, U = Unani, S = Siddha, H = Homeopathy and Naturopathy
- **Problems of Indian Health Infrastructure:**
 - (i) Malnutrition and inadequate supply of vaccines.
 - (ii) No full utilisation of public health services.
 - (iii) Insufficient stock of medicines to Primary Health Centres.
 - (iv) Urban-rural and poor-rich division class.
- **Measures to improve Health Infrastructure of India:**
 - (i) Decentralisation of public health services.
 - (ii) Proper and sufficient supply of medicines, vaccines and other equipment and facilities to Primary Health Centres.
 - (iii) Use of Information Technology to spread health awareness.
 - (iv) Check on divide between rural and urban, rich and poor.

➤ **Government Schemes/Initiatives**

- (i) Ayushman Bharat National Health Protection Scheme (Sep. 2018)
- (ii) Swachh Bharat Mission (Oct. 2014)
- (iii) Make in India (Sep. 2014)
- (iv) PMJDY (Pradhan Mantri Jan Dhan Yojana) (Aug. 2014)
- (v) PMUY (Pradhan Mantri Ujjwala Yojana) (May 2016)
- (vi) Digital India (May 2015)
- (vii) Pradhan Mantri Jeevan Jyoti Bima Yojana

Sustainable Economic Development

- **Environment:** It means, at a particular place, surrounding or conditions in which our organism lives and operate.
- **Physical Environment:** This is also known as non-biological environment. It includes land, water, climate, mountains minerals and all other sources which nature provides to us as a free gift.
- **Biological Environment:** It is also called living environment. It includes human, animals, birds, plants and all micro-organisms.
- **Functions and Role of Environment:**
 - (i) It supplies resources
 - (ii) It sustains life
 - (iii) It assimilates waste and
 - (iv) It enhances quality of life
- **Causes of Environmental Degradation:**
 - (i) Population growth
 - (ii) Poverty
 - (iii) Agricultural development
 - (iv) Industrialisation
 - (v) Transport development
 - (vi) Urbanisation
 - (vii) Foreign indebtedness
 - (viii) Market failure
- **Effects of Economic Development on Environment:**
 - (i) Global warming
 - (ii) Depletion of Ozone layer
 - (iii) Environmental crisis
 - (iv) Rise in opportunity cost of negative environmental impacts
 - (v) Supply-Demand reversal of environment resources
- **Challenges of India's Environment:**
 - (i) Air Pollution
 - (ii) Water Pollution
 - (iii) Solid and hazardous waste
 - (iv) Deforestation
 - (v) Land degradation
- **Sustainable Development:** Development that means the need of the present generation without compromising the ability of future generation to meet their own needs is called sustainable development.
- **Objectives of Sustainable Development:**
 - (i) To increase economic growth
 - (ii) To meet basic needs
 - (iii) To improve quality of life
 - (iv) To maximise the net benefits of future generations
- **Strategies to Achieve Sustainable Development:**
 - (i) Use of Non-conventional sources of energy,
 - (ii) LPG & Gobar gas in rural areas.
 - (iii) CNG in urban areas,
 - (iv) Wind power
 - (v) Solar power through photovoltaic cells
 - (vi) Mini hydel plants
 - (vii) Bio-composting
 - (viii) Bio-pest control



Mnemonics

(i) Adverse Economic Effects of Unemployment:

Water Disparity Is Increasing Annually

- W** : Waste of human power
- D** : Decrease in economic disparity
- I** : Industrial conflict
- I** : Increase in poverty
- A** : Adverse effect on capital formation

(ii) Social and Political effects of unemployment:

Cat Eats High Protein

- C** : Creation of social problems
- E** : Exploitation of labour
- H** : High inequality
- P** : Political instability

(iii) Importance of Infrastructure in economic development:

Ravi Prasad Is Exercising For Relay Race

- R** : Raises productivity
- P** : Provides employment
- I** : Induced foreign investment
- E** : Enhances ability to work
- F** : Facilitates outsourcing
- R** : Raises size of market
- R** : Raises economic development

(iv) Health services after Independence:

Dancing Reduces Rapid Control over Reaching Rare Mass Rate

- D** : Decline in death rate
- R** : Reduction in infant mortality rate
- R** : Rise in expectancy of life
- C** : Control over deadly diseases,
- R** : Reduction in child mortality rate
- R** : Role of private sector
- M** : Medical tourism
- R** : Role of community and non-profit organisations

(v) Non-conventional Sources of Energy:

Call No Names

- C** : Commercial Source of Energy
- N** : Non-commercial Source of Energy
- N** : Non-conventional Source of Energy

(vi) Causes of Environmental Degradation:

Peter Pan Ate Indian Tart Under Frozen Mango

- P** : Population growth
- P** : Poverty
- A** : Agricultural development

I : Industrialisation**T : Transport development****U : Urbanisation****F : Foreign indebtedness****M : Market failure****(vii) Effects of Economic Development on Environment:**

Global Deforestation Extracts Radiation from Sun

G : Global warming**D : Depletion of ozone layer****E : Environmental crisis****R : Rise in opportunity cost of negative environmental impacts****S : Supply-Demand reversal of environment resources****Know the Terms**

- **Casualisation:** Increase in the percentage of casual workers in total work force.
- **Informalisation:** A situation in which employment in unorganised sector is increasing whereas in organised sector, it is decreasing in the country.
- **Educated unemployment:** A situation when most of the educated people are unable to find job while they are able to work.
- **Structural unemployment:** Unemployment in which the skill set of workers do not match with the skill set required.
- **Frictional unemployment:** Unemployment in which the worker has just left the job and looking for another job.
- **Voluntary unemployment:** Unemployment in which the worker is willingly not working.
- **Rural electrification:** Supply of electricity to villages for their development.
- **Morbidity:** The state of being ill.
- **Mortality:** The death rate of the particular age or sex group.
- **Abiotic components:** The non-living components of an environment like air, soil, rock, etc.
- **Biotic components:** The living component of an environment like plants, animals, etc.
- **Green House Gas:** The gases like carbon dioxide, carbon monoxide, sulphur dioxide, etc. which causes the rise in the temperature of the earth.
- **Global Warming:** The rise in the average temperature of the earth.
- **CFC:** The chemical released from the electronic appliances that depletes the ozone layer.

□□

CHAPTER-5**COMPARATIVE DEVELOPMENT EXPERIENCES OF INDIA
WITH ITS NEIGHBOURS****Revision Notes**

- **Introduction:** India is geographically, the largest country in South Asia and seventh largest country in the world. It is second populous country after China in the world. An average growth rate of population was 2.2% per annum during the past decade but now it is 1.0%. Its total area is 32.9 lakh sq. kms and total present population is 138 crores.

On the other hand, Pakistan extends from the Arabian Sea 1600 kms northward. It is a neighbouring state of India. Total area of Pakistan is 8.03 lakh sq. kms. Its population is 1/7th of India. Average growth rate of population is 2.0% per annum as per 2020.

China is located in Eastern Asia and it is the third largest country in the world in terms of total area. It has highest population in the world with an annual population growth rate of nearly 0.3% per annum.

- **Developmental Path:** India, Pakistan and China have many common points in their plans for development. While India and Pakistan became independent nations in 1947 and the communist China came into existence in 1949. After a revolution, all these

countries started their planning along similar lines. India announced its First Five Year Plan for 1951–56, Pakistan announced its Medium Term Development Plan in 1956. China announced its First Five Year Plan in 1953. Since 2018, Pakistan is working on the basis of 12th Five Year Development Plan, whereas, China is working on 14th Five Year Plan (2021–25). Until March 2017, India has been following Five Year plan based development model.

- **Demographic Indicators:** India is a populous country just like China. These two countries together comprise one-third of the population of the world. As far as Pakistan is concerned, its population is much less around 10% when it is compared with China or India. The density of population in China is the lowest as compared to Pakistan and India. China has a low fertility rate but Pakistan has a high rate. Both these countries have high urbanisation rate. In India, this trend is slower (34%) as compared with Pakistan (36.7%) and China (60%).

Some Demographic Indicators

Country	Estimated Population (in million) (2018)	Annual Growth of Population (2018)	Density (per sq. km)	Sex Ratio (2018)	Urbanisation (2018)	Fertility Rate (2018)
India	1352	1	455	924	34	2.2
China	1427	0.5	148	949	60	1.7
Pakistan	212	2.1	275	943	36.7	3.4

Source: World Development Indicator, 2019

Some selected Indicators of Human Development, 2020

Items	India	China	Pakistan
Human Development Index (Value)	0.645	0.761	0.557
Rank (based on HDI)	131	85	154
Life expectancy at birth (years)	69.7	76.9	67.3
Mean years of schooling (% aged is 15 and above)	6.5	8.1	5.2
GNP per capita (PPP US\$)	6,999.6	16,829.9	4,898.4
People below Poverty Line (at \$3.10 a day PPP) (%) 2017	37	32	44
Infant Mortality Rate (Per 1000 live births)	28.3	6.8	55.7
Maternal Mortality Rate (per 1 lakh births) as per 2017	145	29	140
Population using improved sanitation (%)	59.5	84.8	59.9
Population with sustainable access to improved water source (%)	94	96	91
Percentage of under nourished children	15	9	20

Source: Human Development Report 2020 and World Development Indicators.

- **Gross Domestic Product:** Economic development of a country can be judged through GDP growth rate. GDP growth rate explains the growing rate of valuable output of the country. Per capita income was 2171 US dollars in India whereas it was 1138 US dollars in Pakistan. Per capita GDP (PPP) in US Dollars was 7762.9 in India against 5567.1 in Pakistan. It means per capita income and GDP both were higher in India in comparison to Pakistan. Pakistan's GDP is roughly 12% of India's GDP and India's GDP is approx. 40% of China's GDP. China has impressive growth rates in recent decade. China's growth rates have crossed 8 % per annum in recent years.
- **Indicators of Human Development:** The Human Development Index is an important indicator. As far as human development indicators are concerned, China is ahead of India and Pakistan. Many indicators like the GDP per capita or proportion of population below poverty line or health indicators such as mortality rates, access to sanitation, literacy, life expectancy or malnourishment. China is above the other two countries. Pakistan is ahead of India in reducing proportion of people below the poverty line. Its performance in access to water is better than that of India. So far as the proportion of people below the poverty line is concerned, situation in China is half as bad as in India and Pakistan.
- **Annual Growth of GDP (%) 1980–2018**

Countries	1980–90	2019–2020
India	5.7	8.0
China	10.3	2.3
Pakistan	6.3	0.5

Source: Key Indicators of Asia and Pacific 2019, Asian Development Bank, Philippines; World Development Indicators 2019

➤ **Sectoral Share of Employment and GDP (%) in 2018–2019**

Country	Contribution to GDP			Distribution of Workforce		
	India	China	Pakistan	India	China	Pakistan
Agriculture	16	7	24	43	26	41
Industry	30	41	19	25	28	24
Services	54	57	59	32	46	35
Total	100	100	100	100	100	100

Source: Human World Development Indicators 2019; Key Indicators of Asia and Pacific 2019

- **Development Strategies: An Appraisal:** The development strategies of a country serve the purpose of a model to other countries. Other countries learn a lesson from the experience of a country and try to formulate their development programmes on that basis. It is necessary to understand the reasons behind the success or failure of a plan. Only then a neighbouring country should adopt a particular plan of action. A development strategy has various phases. These should be compared and contrasted for better assessment of the entire strategy. Structural reforms in China were introduced in 1978 due to slow pace of growth and lack of modernisation. It was found that the establishment of infrastructure in the areas of education and health, land reforms, long existence of decentralised planning and existence of small enterprises had helped positively in improving the social and income indicators in the post reform period. Scholars argue that in Pakistan the reform process led to worsening of all the economic indicators. However, during last few years, Pakistan has recovered its economic growth and has been sustaining.

Know the Terms

- **Economic Growth:** An increase in output and real incomes, it is usually measured using GDP.
- **Economic Integration:** Refers to the increasing interdependence and integration of modern economies.
- **Green Revolution:** The improvement in agricultural yields which occurred in many parts of the developing world after technical changes.
- **Human Development Index:** A measure of quality of life constructed.

