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# INDIAN ECONOMY

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*Authored By*
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# CONTENTS

# TOPICS FOCUS & TREND OF QUESTIONS

### INTRODUCTION AND NATIONAL INCOME

This chapter provides an overview of various important sectors of Indian economy and its specific features. Important ceoncepts of this chapter are GDP, GNP, GDP deflator and other such statistical tools as a measure of economic growth. The changed pattern of UPSC demands a deeper understanding of their meaning and importance as well as how they are calculated and their trends in recent years, which has also been asked in previous exams.

### INFLATION

Important topics from examination point of view are causes of supply side and demand side inflation, role of Monetary Policy and Fiscal Policy in inflation management, its ill effects on economy and other related concepts such as deflation, hyper-inflation and stagflation. Questions asked in previous year exams include causes of inflation, effect of liquidity on inflation, impact of inflation on bond yield and debtors etc.

### ECONOMIC GROWTH AND DEVELOPMENT

This chapter covers the important and relevant concepts and issues of growth and development. Other important topics dealt here are difference between growth and development, various measures of development, human development and HDI, sustainable development, MDGs etc. Most of the questions asked in previous exams from this section are regarding factors contributing to economic growth, constituents of HDI etc. Trends in savings and investment, capital-output ratio, etc.

### ECONOMIC PLANNING IN INDIA

This chapter discusses meaning, evolution and strategies of planning. From examination perspective, the important focus areas are role of Planning Commission and NDC, objectives and achievements of various Five Year Plans and planning in liberalised economy. Previous years' questions asked in examination includes topics such as mobilisation of resources, approach of planning in India, structure and functions of NDC and Planning Commission.

### DEMOGRAPHIC PROFILE

This chapter assumes greater significance in the background of demographic dividend in India. Key concepts such as demographic transition theory, birth and death rates, age structure, population density, sex ratio and literacy are pertinent from examination point of view. Further questions can also be asked from census data, Population Policy and family welfare programmes. Earlier questions asked in competitive exams include how demographic dividend can be reaped, age structure-composition of India etc.

## MONEY AND BANKING

This is the most important chapter in economy section. The revised pattern of examination has asked analytical type of questions from topics such as money and capital market and reforms measure therein, banking in India, Monetary Policy and RBI, interest rates and money supply, insurance and pension sector. Most questions asked in the exams are about RBI's regulatory role, repo and reverse repo rate, money supply and corrosponding order of liquidity, priority sector lending, lead bank schemes and measures of financial inclusion.

## INDIAN PUBLIC FINANCE

Most essential topics of this chapter are Fiscal Policy, public revenue and expenditure and trends therein, taxation system, GST, fiscal consolidation, FRBM Act, Finance Commission and various types of budgets like gender budgeting outcome and performance budgeting etc. Questions asked in examination test the conceptual understanding of the above topics such as what is the impact of deficit financing, what are various ways to achieve fiscal consolidation constituents of GST, VAT, CENVAT and related concepts, fiscal federalism etc.

## INDIA'S BOP

This chapter deals with India's external sector and important topics here are meaning and constituents of BoP, current and capital account convertibility, FDI and FII, value of rupee in forex market,

## INTERNATIONAL FINANCIAL ORGANISATION

This chapter offers an in-depth understanding of structures, functions, and way of lending of important international financial organisations such as IMF, World Bank group, WTO, ADB etc. Questions have been asked about lending programme of IMF, Agreement on Agriculture and NAMA of WTO , TRIPS, TRIMS and DOHA sound of WTO, agencies of World Bank and terms of lending, SDRs and Quota reforms etc.

## AGRICULTURE

It is the most important sector of Indian economy. Essential topics to be read in this chapter are crops and cropping pattern, Second Green Revolution, Agricultural Price Policy , finance and marketing, extension services, farm credit, problems in productivity and land reforms, food processing and related schemes. Questions asked in previous years' exams include production trends and patterns, various agricultural institutions and their functions, government schemes related to agriculture, issues and trends in agricultral credit, objectives of Mega food Parks and related food processing schemes etc.

## INDUSTRIAL SECTOR

From an examination perspective, important topics are New Industrial Policy, MSMEs, PSEs, industrial sickness, Disinvestment Policy, role of CCI, National Manufacturing Policy, NIMZs, and recent trends in industrial growth. Questions have been asked in previous exams regarding skill development, labour laws and reforms, measures to promote MSMEs, Index of Industrial Production, core sectors of manufacturing etc.

## SERVICES SECTOR

Significant topics in this chapter are performance and trends of various services sectors such as IT and ITeS, real estate, communications, construction, tourism sectors etc, issue of FDI and liberalisation of services sector and services employment in India. East years examination have focused on Contitution and performance of services sector in economic growth.

## INFRASTRUCTURE

Important topics in this chapter are classification and significance of infrastructure, problems in infrastructure development, issue of investment and financing, PPPs and their advantages, performance of energy sector and reforms therein, urban infrastructure and transport, critical infrastructure.

## NATURAL RESOURCES

This chapter deals with minerals, water, land and forest resources. Essential topics in this chapter are concerned with mineral resource's distribution, use, conservation and management. Pertinent to this is issue of environment management and climate change. Trends of previous Years exams suggests questions about watershed management, land use policy, national mining policy, social and agro forestry, application of S and T in conservation and management climate change negotiations etc.

## POVERTY AND UNEMPLOYMENT

Important topics in this chapter are concepts of absolute and relative poverty, methodology of poverty calculation, various committees and their recommendations, poverty alleviation schemes, types of unemployment and methodology of calculating unemployment, MNREGA and other employment generation schemes.

## INCLUSIVE DEVELOPMENT

This chapter is a recent addition in economy section and significant weightage has been given in the examination. The important topics are related to concept, need and strategies of inclusive growth. Important government policies and schemes relating to health and sanitation, education, skill development, rural development, women and child development etc are important from examination point of view.

# Chapter one
# Introduction to Economics

*"Economics is a social science, which tries to study how to achieve the maximum benefits using limited resources. Understanding economics is important to provide for the maximum welfare of society using the resources available."*

## Meaning of Economics

- The term 'economics' comes from the Greek term *Oikonomos*, which is composed of *oikos* (house) and *nomos* (custom or law), meaning Rules of the Household. Economics is the social science that studies economic activities to gain an understanding of the processes that govern the production, distribution and consumption of goods and services in an economy.
- Initially, the study of economics concentrated mainly on wealth by concentrating on factors of production and consumption. This emphasis on wealth excluded from its study, those who were not directly connected with the formal economic system. Thus, the needs of poor, senior citizens, children etc. were neglected. It was corrected with the emergence of welfare economics, which focused on welfare needs of the whole society instead of just the production of wealth.

## Branches of Economics

*Traditionally, economics has been divided into the two main branches :*

### Micro Economics

- It examines the economic behaviour of individual actor at the level of the individual economic entity — the individual firm, the individual consumer and the individual worker.
- It is concerned with how supply and demand interact in individual market and how these interactions determine the price level of goods and services.

### Macro Economics

- It studies the economy as a whole and its features like national income, employment, poverty, balance of payments and inflation.
- It is concerned with how the overall economy works. It studies such things as employment, Gross Domestic Product (GDP) and inflation.

## Some Other Branches of Economics

### Development Economics

- It is a branch of economics, which deals with the economic aspects of the development process in low income countries.
- The goal of development economics is to determine how poor countries can be transformed into prosperous ones.

### Behavioral Economics

- This branch studies the effects of social, cognitive and emotional factors on the economic decisions of individuals and their consequences for market prices, returns and resource allocation.

- It is mainly exploring why people sometimes make irrational decisions and why and how their behaviour does not follow the predictions of economic models.

### Environmental Economics

- This branch studies the economic impact of environmental policies. Its goal is to balance the economic activity and the environmental impacts, by taking into account all the costs and benefits.

### International Economics

- It is a branch of economics, which studies economic interactions among different countries, including foreign trade, foreign exchange, balance of payments and balance of trade.
- The guiding principle in the study of international economics is comparative advantage, which indicates that every country, no matter what their level of development, can find something that it can produce cheaper than others.

### Information Economics

- It is a branch, which studies how information and information technology influence the economy.
  *Information economics has certain characteristics, like:*
  (i) It is easy to create, but hard to trust.
  (ii) It is easy to spread, but hard to control.

### Demographic Economics

- Demographic economics or **Population economics** is the application of economics to demography; the study of human population, including size, growth, density, distribution and vital statistics.

## Types of Economies

- Typically, economies are divided into different types based on the extent of government involvement in economic decision-making.
  *Based on the above criteria, the following are the major types of economies:*

### Traditional Economy

- In this type of economy, there is very little government involvement. Allocation of resources here is based on rituals, habits or customs.
- Economic roles are defined by the family and people work together for the common good. There is also very little individual choice in this system. Examples of this type exist in tribes in Amazon, Aborigines in Australia etc.

### Free Market Economy

- This type of economy also has very little governmental interference or control. Economic decisions here are made based on market principles. There is a lot of competition between firms, which provides many choices to consumers.
- Resources for production are under private ownership and they make their decisions with the desire to maximise profits. Although, there are no pure free market economies. United States and Australia come close to this type.

### Command Economy

- Here, the resources of production are completely under government control. The functioning of these economies is based on control planning. Due to lack of competition, resource allocation is inefficient and consumers have very little choices. Examples of this type are the former Soviet Union, Cuba, North Korea etc.

### Mixed Economy

- This type of economy consists of a combination of public sector and private sector units. Here, the government is the decision-maker for the public sector and individuals, and businessmen make decisions for the private sector.
- It basically incorporates governmental involvement in a market based economy. Examples of this type are India, Russia and UK etc.

### Open Economy

- An economy is said to be open, if it has trade with other economies. In this economy, market is mostly free from trade barriers and where exports and imports form a large percentage of the GDP.
- The degrees of the openness of an economy determines government's freedom to pursue economic policies of its choice and the susceptibility of the country to international economic cycles.

### Closed Economy

- An economy is said to be closed, if it has no trade or trade area with other economies. In this economy, the consumer get everything within the economic borders and government act as the arbitrator, articulator and facilitator.

### Capitalist Economy

- Capitalism is the economic system based on private or corporate ownership, production and distribution of goods. Capitalists favour a system of free enterprise which means the government does not interfere in the economy that the laws of supply and demand will make sure that the economy runs most efficiently in meeting people's needs. Capitalism is characterised by competition in which there is rivalry in supplying or getting an economic service or goods.

### Socialist Economy

- Socialism is an economic system in which the means of production are socially owned and used to meet human needs instead of to create profits.
- Socialism tends to favour cooperation whereas capitalism is characterised by competitions. A form of socialism called **communism** sprang up based on the writings of Karl Marx and Friedrich Engels.
- Communism advocates class struggle and revolution to establish a society of cooperation with strong government control. Communism predominated in the former Soviet Union and much of Eastern Europe at one time. Today, it predominates in China and Cuba, but its influence has lessened.

## Sectors of an Economy

- A nation's economy can be broadly divided into various sectors to define the proportion of people engaged in a particular sector. This categorisation is generally seen as a continuum of the distance from the natural environment.
- *Traditionally, economies are divided into the following three sectors* :

### (i) Primary Sector

- This sector is involved in the extraction or harvesting of products from the Earth. It includes the production of raw materials and basic foods. Some of the activities included in this sector are agriculture, mining, forestry, fishing, quarrying etc.
- The packaging and processing of raw materials is also considered as a part of this sector. As an economy develops the share of primary sector in total production and employment goes down.

### (ii) Secondary Sector

- The secondary sector of the economy is involved in the production of finished goods. All manufacturing, processing and construction activities lie in this sector (in India, construction sometimes considered as part of the services or tertiary sector).
- Some of the activities in this sector are metal working, automobile manufacturing, textile, production, shipbuilding etc. Most economies in their process of development go through the middle phase, where the secondary sector becomes the largest sector of the economy in terms of production and employment with the reduction in importance of the primary sector.
- India is an exception, where we have directly moved to services sector development, without first improving the manufacturing capabilities.

### (iii) Tertiary Sector

- The tertiary sector of the economy is also called as the **services sector**. This sector provides services to the general population and to business. Some of the activities which are part of this sector are retail, transportation, entertainment, tourism and banking etc. In the advanced developed economies, the tertiary sector is the largest in terms of production and employment.
- Sometimes, two more sectors, i.e. quaternary and quinary are defined separately, even though these can also be considered as part of the services sector itself.

## Other Sectors of Economy

### Quaternary Sector

- This sector consists of the intellectual and knowledge based activities. Examples of activities associated with this sector are research and development, culture, information technology, consulting, financial planning, education etc.

### Quinary Sector

- This sector consists of the highest levels of decision-making in a country. This includes the top officials of government, media, universities etc.

### Classification of Countries by the World Bank

The World Bank prepares the World Development Report (WDR). The WDR as on 1st July, 2021, classified the different countries on the basis of their per capita income.

**Categories Based on Per Capita Income**

- High income countries — $ 12,695 and above
- Upper middle income countries — Above $ 4,096 to $ 12,695
- Lower middle income countries — Above $ 1,046 to $ 4,096
- Low income countries — $ 1,046 and less.

**Source** *World Bank Report, 2021*

## Classification of Countries Based on Economical Activities

### Developed Country

- It refers to a country with a relatively high level of economic growth and security. A country's degree of development is evaluated on the basis of per capita income or GDP, level of industrialisation, general standard of living and the amount of widespread infrastructure.

### Developing Country

- It is also called a **less developed country** with lower living standard, underdeveloped industrial base and low Human Development Index (HDI).

### Least Developed Country

- According to the United Nations, countries having lowest indicator of socio-economic development with the lowest HDI ratings are called as least developed countries.

# Self Check

## Build Your Confidence

**1.** A 'closed economy' is an economy, in which **[UPSC 2011]**
*(a)* the money supply is fully controlled
*(b)* deficit financing takes place
*(c)* only export takes place
*(d)* neither export nor import take place

**2.** Mixed economy means an economy where **[UPSC 2009]**
*(a)* both agriculture and industry are equally promoted by the state
*(b)* there is co-existence of private sector alongwith the public sector
*(c)* there is importance of small scale industries alongwith heavy industries
*(d)* economy is controlled by military as well as civilian rules

**3.** Consider the following statements regarding secondary sector
1. Most economies in their process of development go through the middle phase, where the secondary sector becomes the largest sector of the economy.
2. India is an exception, where we have directly moved to service sector development without first improving the manufacturing capabilities.

*Which of the statement(s) given above is/are correct?*
(a) Only 1
(b) Only 2
*(c)* Both 1 and 2
*(d)* Neither 1 nor 2

**4.** Consider the following statements regarding tertiary sector
1. In the advanced developed economies, the tertiary sector is the largest in terms of production and employment.
2. Quaternary and quinary are not a parts of service sector.

*Which of the statement(s) given above is/are correct?*
*(a)* Only 1
*(b)* Only 2
*(c)* Both 1 and 2
*(d)* Neither 1 nor 2

**5.** Which one of the following statements regarding capitalist economy is not true?
*(a)* Capitalism is the economic system based on private or corporate ownership
*(b)* Capitalists favour the government interference in the economy
*(c)* Capitalism is characterised by competition in the market
*(d)* In capitalist economy, market is free

**6.** Which one of the following statements regarding socialist economy is not correct?
*(a)* In this system, means of production is socially owned
*(b)* Socialist economy favours cooperative society
*(c)* It predominates in USA and Cuba
*(d)* It emphasised on meeting human needs instead of to create profits

**7.** Consider the following statements regarding macro economics
1. It is concerned with the overall economy works.
2. It studies employments, gross domestic product and inflation.

*Which of the statement(s) given above is/are correct?*
*(a)* Only 1 *(b)* Only 2
*(c)* Both 1 and 2 *(d)* Neither 1 nor 2

**8.** In which of the following types of economy, the resources of production are completely under control?
*(a)* Mixed economy
*(b)* Open economy
*(c)* Closed economy
*(d)* Command economy

**9.** In which type of economy, resources for production are under private ownership and they make their decisions with the desire to maximise profits?
*(a)* Command economy *(b)* Capitalist economy
*(c)* Free Market economy *(d)* Mixed economy

**10.** In which type of economy, the consumers get everything within the economic borders and government acts as the arbitrator?
*(a)* Closed economy *(b)* Open economy
*(c)* Capitalist economy *(d)* Mixed economy

**11.** An economy is said to be open economy if
*(a)* it has trade with other economies.
*(b)* it has no trade area with other economies.
*(c)* it has basically incorporates governmental involvement.
*(d)* None of these

**1.** (d) **2.** (b) **3.** (c) **4.** (a) **5.** (b) **6.** (c) **7.** (c) **8.** (d) **9.** (c) **10.** (a)
**11.** (a)

Chapter two
# National Income

*National Income is an uncertain term which is used interchangeably with national dividend, national output and national expenditure. On this basis, national income accounting records the level of activity in accounts such as total revenues earned by domestic corporation, wages paid to foreign works and amount spend on sales and income taxes by corporations and individuals outsiding in the country.*

## National Income

- National Income is defined as the total net earnings from the production of goods and services in a country over a period of time, usually one year and consisting essentially of wages, salaries, rent, profits and interest.
  National Income $= C + I + G + (X - M)$

National income is considered as NNP at factor cost.

*Where,*
- C = Total Consumption Expenditure
- I = Total Investment Expenditure
- G = Total Government Expenditure
- X = Export
- M = Import

- It can be measured by Gross National Product (GNP), Gross Domestic Product (GDP), Gross National Income (GNI), Net National Product (NNP), Net National Income (NNI) and Per-Capita Income (PCI).

## National Income and its Related Aggregates

- Various National Income aggregates are estimated either at factor cost or at market price.

### Factor Cost

- Factor cost refers to cost of factors of production *viz.*, rent of land, interest of land, interest of capital wages for compensation of employees for labour and profit for entrepreneurship
  FC = MP – Indirect taxes + Subsidies

### Market Price

- Market price is the price that customers actually pay. It includes the component of indirect taxes and of subsidies. Accordingly, when indirect taxes are deducted and subside added to the market price, we get values of National Income at factor cost
  MP = FC + Indirect taxes – Subsidies
  *Or* MP = FC + Net indirect taxes

## GDP (Gross Domestic Product)

- It is the monetary value of all final goods and services produced with a country's border in a specific time.
- GDP = C + I + G + NX

*Where* C = Consumption
I = Investment
G = Government expenditure
NX = Net Export

GDP at FC and MP

$GDP_{MP} = GNP_{MP} - (X - M)$

$GDP_{FC} = GNP_{FC} - (X - M)$

*Where*, X is the export and M is import of a country.

### Nominal GDP

- It is the market value (money-value) of all final goods and services produced within the country.

### Real GDP

- The adjustment transforms the nominal GDP into an index for quantity of total output. It is a measurement of the value of output economy, adjusted for price changes.

### India Changes Base Year for GDP Calculation

- Choosing a base year is the first step while counting the real GDP.
- For the revised GDP calculations the Indian statisticians have changed the base year from 2004-05 to 2011-12.
- The change in base year is not an unusual phenomena as base year is regularly updated after every five year.
- The government has proposed the new base year for GDP and IIP (Index of Industrial Production) as 2017-18 while for CPI it will be 2018.

## GNP (Gross National Product)

- It is the market value of all products and services produced in one year of a country (i.e. by labour and property).

$$GNP = GDP + X - M.$$

**Difference Between GDP and GNP**

In GDP, goods and services produced in a country is added, whether it is produced by residents of the country or foreigners. In GNP, the production of foreigners in the country is not included, while the production of nationals outside the country is included.

### Net National Product (NNP)

- It is the value of GNP after deducting depreciation of plant and machinery.

NNP = GNP – Depreciation

National Income (NI) = NNP – Indirect taxes + Subsidies

## Real National Income (RNI)

- It is the value of National Income adjusted for inflation and calculated from some reference point (base year).

Real National Income = NNP at current prices × 100/Price index

### Per-Capita Income (PCI)

- It is the measure of the amount of money that is being earned per person in a certain area.
- Per-Capita Income of a Country

$$= \frac{\text{National Income}}{\text{Population of the Country}}$$

### Personal Income (PI)

- It is the income of the residents (individuals) of a country. To calculate personal income, transfer payments to individuals are added to National Income, while social security contributions, corporate tax and undistributed profits are subtracted.

Personal Income = National Income
+ Transfer payments
– Social security contributions
– Corporate tax
– Undistributed profits

### Disposable Income (DI)

- It is the income of individuals at their disposal after paying direct tax liabilities.

Disposable income = Personal income
– Direct taxes (e.g. Income tax)

## Green Economy

- In this economy, which deals with the environmental risks and ecological scarcity and also an economy that aims for sustainable development without degrading the environment.

### Green GDP

- It is the calculation of net natural consumption (i.e. resource depletion, environmental degradation, protective and restorative environmental initiatives).

### Green GNP

- GNP means that there has to be an adjustment for the depletion of the country's physical assets.

## Calculating National Income

*According to Simon Kuznets, National Income can be calculated by three method are as follows:*

*(i)* **Product Method** In this method, net value of final goods and services produced in a country, during a year is obtained, which is called Total Final Product.

*(ii)* **Income Method** In this method, a total of net income earned by working people in different sector and commercial enterprises is obtained. By this method, NI is obtained by adding receipts as total rent, total wages, total interest and total profit.

*(iii)* **Consumption Method** It is also called Expenditure Method. Income is either spent on consumption or saved. Hence, NI is the additional of total consumption and total saving.

## Problems in Calculating of National Income

- **Black Money** Illegal activities like smuggling and unreported income due to tax evasion and corruption are keeping outside the GDP estimates. Thus, parallel economy poses a serious hurdle to accurate GDP estimates. It also causes loss of revenues to the state exchequer due to tax evasion.
- **Non-Monetisation** In most of rural economy considerable portion of transaction occurs informally and, they are called as **Non-Monetised Economy**. This keeps the GDP estimates at lower level than the actual.
- **Growing Service Sector** Many services like BPO, value addition in legal consultancy, health services, financial and business services and service sector

as a whole is not based on accurate reporting and hence, national income is underestimated.

- **Double Counting** It is also a hurdle to accurate GDP estimates. Though, there are some corrective measures, but it is difficult to eliminate it.

## Estimation of National Income in India

- The first attempt to calculate National Income of India was made by **Dadabhai Naoroji** in 1867-68, who estimated Per-Capita Income to be ₹ 20.
- The first scientific method was made by Professor VKRV Rao in 1931-32, but was not very satisfactory.
- The first official attempt was made by National Income Committee headed by Professor PC Mahalanobis in 1949.
- According to the National Income Committee Report (1954), National Income of India was ₹ 8710 crore and Per-Capita Income was ₹ 225 in 1948-49.
- In India, the National Statistical Office (NSO) under Ministry of Statistics and Programme Implementation is responsible for estimation and publication of National Income.

## Limitations in the Measurement of National Incomes

- *Whilst measuring National Income, we need to be aware of some of the following limitations, challenges, problems which are discussed below*
  - — National Income measures domestic economic performance, not social welfare, but there should be a strong positive correlation.
  - — National Income understates social welfare, non-market transactions like home-makers service and do-it-yourself projects are not counted.
  - — National Income does not measure an increase in leisure or work satisfaction changes in product quality.
  - — National Income does not accurately reflect changes in environment like oil spills clean-up is measured as positive output, but increased in pollution is not measured as negative.
  - — Per-Capital Income is a more meaningful measure of living standards than total National Income.
  - — Problem of double counting, however, problem of double counting could be avoided by utilising the value added approach.
  - — Problems of depreciation estimation.
  - — Different methods of calculating or estimating depreciation.
  - — Arbitrary definition.
  - — Inclusion or exclusion of certain items in National Income accounting can cause confusion.
  - — Challenges like difficulties in getting information, especially those related to underground economy.

## Gross Fixed Capital Formation (GFCF)

- It refers to net additions of capital stock such as equipment, buildings and other intermediate goods.
- The term fixed signifies that only fixed capital is counted and financial assets, stocks of inventories etc are excluded. GFCF also excludes land sales and purchases.

### Incremental Capital Output Ratio (ICOR)

- ICOR is used to assess a country's level of production efficiency. ICOR equals Annual Investment or Annual Increase in GDP. Higher levels of ICOR means that capital is not being used efficiently to increase production. Generally, for most countries ICOR is at around 3.

## Indian Organisations Related to National Income Accounts

### Ministry of Statistics and Programme Implementation

The Ministry of Statistics and Programme Implementation (MOSPI) is a ministry of Government of India concerned with coverage and quality aspects of statistics released. The surveys conducted by the Ministry are based on scientific sampling methods. The Ministry of Statistics and Programme Implementation (MOSPI) came into existence as an Independent Ministry on 15th October, 1999 after the merger of the Department of Statistics and the Department of Programme Implementation.

### National Statistical Office

The government has merged the Central Statistical Office (CSO) and National Sample Survey Office (NSSO) under the Ministry of Statistics and Programme Implementation (MOSPI) into a single entity on 23rd May, 2019. The new merged entity has been named the National Statistical Office (NSO) and will continue to be headed by the secretary of MOSPI.

The National Statistical Office (NSO) headed by a Director General is responsible for conduct of large scale sample surveys in diverse fields on All India basis.

The NSO has four divisions :

- **Survey Design and Research Division (SDRD) :** This division, located at Kolkata is responsible for technical planning of surveys, formulation of concepts and definitions, sampling design, designing in inquiry schedules, drawing up of tabulation plan, analysis and presentation of survey results.

- **Field Operations Division (FOD) :** The division, with its headquarters of Delhi/Faridabad and a network of six Zonal Offices, 52 Regional Offices and 117 Sub-Regional Offices spread throughout the country, is responsible for the collection of primary data for the surveys undertaken by NSO.
- **Data Processing Division (DPD) :** The division, with its headquarters at Kolkata and 5 other Data Processing Centers at various places, is responsible for sample selection, software development, processing, validation and tabulation of the data collected through surveys. Price and Wages in Rural India collected through schedule 3.01 (R) is being processed at DPC Giridih. In addition, DPD is also processing the data of Periodic Labour Force Survey (PLFS). Industrial Statistics Wing (IS Wing), DPD, NSO, Kolkata is responsible for sample selection, data processing, validation and tabulation of the Annual Survey of Industries (ASI) data collected through a dedicated web portal.
- **Survey Coordination Division (SCD) :** The division, located at New Delhi, coordinates all the activities of different divisions of NSO. It also brings out the bi-annual journal of NSO, titled "Sarvekshana", and organises National Seminars on the results of various Socio-economic surveys undertaken by NSO.

### National Statistical Commission

The Government of India through a resolution dated 1st June, 2005 set up the National Statistical Commission (NSC). The setting up of the NSC followed the decision of the Cabinet to accept the recommendations of the Rangarajan Commission, which reviewed the Indian Statistical System in 2001. The NSC was constituted with effect from 12th July, 2006 with a mandate to evolve policies, priorities and standards in statistical matters. The NSC has four members besides a Chairperson, each having specialisation and experience in specified statistical fields.

### Central Statistical Office (CSO)

- Central Statistical Office (CSO), was set-up on 2nd May, 1951. It is one of the two wings of the **National Statistical Organisation** (NSO), along with **National Sample Survey Office** (NSSO), responsible for coordination of statistical activities in the country and for evolving and maintaining statistical standards.
- Its activities include compilation of national accounts; conduct of annual survey of industries and economic censuses, compilation of index of industrial production, as well as consumer price indices.
- It also deals with various social statistics, training, international cooperation, industrial classification etc.

### National Sample Survey Office (NSSO)

- The NSSO was set-up in 1950, for conducting large scale sample surveys to meet the data needs of the country, for the estimation of National Income and other aggregates.
- It was recognised in 1970, by bringing together all aspects of survey work under a single agency known as **NSSO**.
- The NSSO undertakes the fieldwork of Annual Survey of Industries in the whole country except Jammu and Kashmir.
- All India household consumer expenditure survey, which is the main source of data on the level of living of the Indian population is also carried out by NSSO.
- NSSO data on socio-economic surveys are regularly released through the quarterly publication 'Sarvekshana' issued by the Department of Statistics.

## National Income's Trend in Growth and Structure

- Real GDP (Gross Domestic Product) at constant (2011-12) prices in the year 2021-22 is now estimated to attain a level of ₹ 135.13 lakh crore. The National Statistics Office (NSO), Ministry of Statistics and Programme Implementation has released the revised GDP numbers on 29th May, 2021. As per new series of base year (2011-12), the GDP of India, at constant price, for the year of 2020-21 was –7.2%.
- The per capita income in real terms (at 2011-12 prices) during 2020-21 is estimated to attain a level of ₹ 85,929 as compared to ₹ 94,556 for the year 2019-20.
  The per capita income at current prices during 2020-21 is estimated to be ₹ 127,768, showing a decline of 4.8 per cent, as compared to ₹ 134,186 during 2019-20.
- As industrialisation spreads, there is an improvement in the share of industry and services. However, the evident change in Indian economy is slow, because of the slow rate of growth of manufacturing.

Growth (in GVA) 2020-21 in Major Sectors (in percentage)(at 2011-12 prices)

| Sector | 2019-20 | 2020-21 |
|---|---|---|
| Agriculture, forestry and fishing | 4.3 | 3.6 |
| Mining and quarrying | –2.5 | – 8.5 |
| Manufacturing | 2.4 | -7.2 |
| Electricity, gas, water supply, etc. | 2.1 | 1.9 |
| Construction | 1.0 | -8.6 |
| Trade, hotels, transport and communication and service related to broadcasting | 6.4 | -18.2 |
| Financing, real estate, professional services, etc | 7.3 | -1.5 |
| Public administration, defence and other services | 8.3 | -4.6 |
| GVA at constant basic prices | 4.1 | -6.2 |

(Based on the data from the NSO)

# Self Check

## Build Your Confidence

**1.** The term National Income represents **[IAS 2001]**
(a) Gross National Product (GNP) at market prices minus depreciation
(b) Gross National Product (GNP) at market prices minus depreciation plus net factor income from abroad
(c) Gross National Product (GNP) at market prices minus depreciation and indirect taxes plus subsidies
(d) Gross National Product (GNP) at market prices minus net factor income from abroad

**2.** Consider the following statements
1. GDP is a better measure of national income than GNP.
2. GNP is always higher than GDP.

*Which of the statement(s) given above is/are correct?*
(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) Neither 1 nor 2

**3.** Which of the following is not included in the estimates of National Income?
(a) Sale of collector's item
(b) Addition to inventory, but not sale of the company's products
(c) Market rent of self owned house
(d) Cost of government services

**4.** Consider the following statements with reference to Indian economy. **[IAS 2010]**
1. The GDP has increased by four times in the last 10 years.
2. The percentage share of public sector in GDP has declined in last 10 years.

*Which of the statement(s) given above is/are correct?*
(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) Neither 1 nor 2

**5.** Consider the following statements
1. National Income is same as Net National Product at factor price.
2. The National Income of India is estimated mainly through production and income methods.

*Which of the statement (s) given above is/are correct?*
(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) Neither 1 nor 2

**6.** Which one of the following institution prepares the National Income estimates in India? **[UPPCS 2006]**
(a) Planning Commission
(b) Reserve Bank of India
(c) Central Statistical Organisation
(d) India Statistics Institute

**7.** Which one of the following sectors is the major contribution towards the Gross Domestic Saving in India in recent time?
(a) Public Sector (b) Private Sector
(c) Corporate Sector (d) Household Sector

**8.** Which one of the following the most appropriate method to measure the economic growth of a country?
(a) National Income
(b) Net National Product
(c) Gross Capital Formation
(d) Gross Domestic Product

**9.** Consider the following statements with reference to Indian economy. **[UPSC 2015]**
1. The rate of growth of Real Gross Domestic Product has steadily increased in the last decade.
2. The Gross Domestic Product at Market Price (in rupees) has steadily increased in the last decade.

*Which of the statement(s) given above is/are correct?*
(a) Only 1
(b) Both 1 and 2
(c) Only 2
(d) Neither 1 nor 2

**10.** The National Income of a country for a given period is equal to the **[UPSC 2013]**
(a) total value of goods and services produced by the nationals
(b) sum of the total consumption and investment expenditure
(c) sum of personal income of all individuals
(d) money value of final goods and services produced

**11.** In which of the following sectors, growth in GDP continuously decreasing from 2013-14?
(a) Agriculture, forestry and fishing
(b) Industry
(c) Manufacturing
(d) Financing, real estate, professional services etc.

**12.** The government has merged the CSO and NSSO under the MOSPI into a single entity from May, 2019. The new merged entity has been named
(a) National Statistical Office
(b) Survey Design Office
(c) National Sample Office
(d) National Statistical Office.

**1.** (c) **2.** (d) **3.** (a) **4.** (b) **5.** (c) **6.** (c) **7.** (d) **8.** (d) **9.** (b) **10.** (d)
**11.** (a) **12.** (a)

# Chapter three
# Economic Growth and Development

*Economic growth is an indicator of wealth, reflecting the quantity of resources available to a society. But it provides no information about the allocation of these resources. Economic development is a normative concept. It applies in the context of people's sense of morality.*

## Economic Growth

- Economic growth is an increased economic capacity to produce goods and services, compared from one period of time to another which is conventionally measured by increased in a country's GDP (Gross Domestic Product) or GNP (Gross National Product) or per capita Net Domestic Product (NDP). **Per capita NDP** is the most appropriate measure of economic growth.
- *Economic growth comes in two forms:*

  *(i)* An economy can either grow extensively by using more resources (i.e. physical, human or natural capital).

  *(ii)* Intensively by using the same amount of resources more efficiently (productively).

## Economic Development

- According to Michael Todaro *"Economic development is an increase in living standards improvement in self-esteem needs and freedom from oppression as well as a greater choice."*
- It is referred to as the quantitative and qualitative changes in economy such as development of human capital, critical infrastructure, regional competitiveness, environmental sustainability, social inclusion, health, safety, literacy etc.
- Human Development Index (HDI) is the most appropriate measure of economic development.

*Economic development in all societies must have atleast the following objectives:*

— To increase the availability and widen the distribution of basic life sustaining goods.

— To raise levels of living by ensuring higher incomes, more jobs and greater attention to culture.

— To expand the range of economic and social choices available to both individuals and nations.

**Difference Between Economic Growth and Economic Development**

| Economic Growth | Economic Development |
|---|---|
| Economic growth refers to an increase over time in a country's real output of goods and services (GNP). | Economic development implies an upward movement of the entire social system in terms of income, savings and investment alongwith progressive changes in socio-economic structure of country. |
| Growth relates to a gradual increase in one of the components of GDP : consumption, government spending investment, net exports. | Development relates to growth of human capital index, a decrease in inequality figures and structural changes that improve the general population's quality of life. |
| It is qualitative in nature and measured through increase in real GDP. | It is qualitative and measured through HDI, GDI, HPI etc. |
| It is concerned with increase in the economy's output. | It is concerned with structural changes in the economy. |

# Measurement of Economic Development

- To measure economic development is a complex process. Economists have used various yardsticks for measuring economic development.

## National Income and Per Capita Income

- This is the traditional approach to measure economic development. World Bank uses the concept of **per capita Gross National Income** (GNI) as a measure for comparing and classifying countries based on their stage of economic development.
- World Development Report (WDR), 2015 (sub-titled **Gender Equality and Development)** classifies countries category wise based on per capita GNI.
- Since official exchange rate is used in the international comparison of GNI, therefore, they do not give a correct picture for two reasons *They are* :
  (i) Purchasing power capacity of a country ignored.
  (ii) Official exchange rate does not reflect the value of non-traded goods.
- In order to overcome this problem, following the work of IB Kravis and others "*International comparisons of real product and purchasing power*" (1978), the UN International Comparison Programme gave the Purchasing Power Parity (PPP) method.

### Purchasing Power Parity (PPP)

PPP approach was given by economist **Gustav Casell** in 1918. The concept is based on the law of one price, wherein the absence of trade and non-trade barriers, identical goods will have same price in different countries, when the prices are expressed in the same currency. PPP exchange rates are calculated by comparing the prices of the same basket of goods are services indifferent countries.

PPP was first used by International Monetary fund (IMF) in 1988 for measuring standard of living in different countries. Indian Economy is the third largest economy in term of PPP.

The PPP is defined as the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as $ 1 would buy in the United States. e.g. if we have to spend ₹ 30 for purchasing the same amount of goods and services as are purchased in spending $ 1 in USA, then the exchange rate in PPP approach is $1= ₹ 30.

## Physical Quality of Life Index (PQLI)

- PQLI was the first attempt towards providing comprehensive measure of economic development. It was developed by **Morris David Morris** in the mid-1970s.
- PQLI is the average of three values, *viz*, life expectancy, basic literacy rate and infant mortality rate. Each value was scaled on 1 to 100, where 1 represents the worst and 100 represents the best.

## Human Development Index (HDI)

- The United Nations Development Programme (UNDP) introduced the HDI in its first Human Development Report (HDR) prepared under the stewardship of Mahbub-ul-Haq in 1990.
- **Life Expectancy Index** (LEI) Educational Attainment Index (EAI) and Standard of Living Index (SLI) are the indicators of HDI.
- Life expectancy refers to life expectancy at birth, not at age 1.
- **Educational Attainment Index** (EAI) is a combination of adult literacy rate and combined enrolment ratio.
- **Standard of Living Index** (SLI) is represented here by the concept of Purchasing Power Parity (PPP). Per capita income is converted into PPP in terms of US dollar.

## Human Development Report (HDR), 2020

- The United Nation's Human Development Report, was released in December 2020 with the theme 'Human Development and the Anthropocene'.
- In the 2020 report, India with a score of 0.645 has been ranked 131 out of 189 countries in terms of HDI. In 2019 report, India was ranked 129 out of 189 countries.
- HDR report is a composite indices covering five sub-indexes including Human Development, Inequality Adjusted Human Development, Gender Development, Gender Inequality and Multidimensional Poverty Index.

Human Development Group

| Group | Index Value |
|---|---|
| Very high human development | 0.800 and above |
| High human development | 0.700 and 0.799 |
| Medium human development | 0.550 and 0.699 |
| Low human development | 0.352 and 0.549 |

## Inequality-Adjusted Human Development Index (IHDI)

- IHDI adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. The IHDI accounts for inequalities in HDI dimensions by 'discounting' each dimension's average value according to its level of inequality.

- The IHDI equals the HDI, when there is no inequality across people, but is less than the HDI as inequality rises. In this sense, the IHDI is the actual level of human development (accounting for this inequality), while the HDI can be viewed as an index of potential human development (or the maximum level of HDI) that could be achieved, if there was no inequality.
- The loss in potential human development due to inequality is given by the difference between the HDI and the IHDI and can be expressed as a percentage. India's HDI value after discounting the IHDI is 0.477.

## Gender Inequality Index (GII)

- GII reflects women's disadvantage in three dimensions: reproductive health, empowerment and the labour market for as many countries as data of reasonable quality allow.
- The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equal to 1, which indicates that women fare as poorly as possible in all measured dimensions.

## Gender Development Index (GDI)

- The new GDI measures gender gap in human development achievements in three basic dimensions of human development health, measured by male and female life expectancy at birth, education and command over economic resources.

## Multidimensional Poverty Index (MPI)

- MPI was developed in 2010, by Oxford Poverty and Human Development Initiative and UNDP and different factors to determine poverty beyond income based list were used.
- The MPI is an index of acute multidimensional poverty. It shows the number of the people, who are multidimensionally poor (suffering deprivation in 33% of weighted indicators) and the number of deprivation with which poor households typically contend. It reflects deprivation in very rudimentary services and core human functioning for people across 104 countries. The index uses same three dimensions as the Human Development Index such as health, education and standard of living.
- *These are measured using 10 indicators:*

Dimensions and their 10 Indicators

| Dimensions | Indicators |
|---|---|
| Health | 1. Child mortality |
| | 2. Nutrition |
| Education | 3. Years of schooling |
| | 4. Children enrolled |
| Living Standards | 5. Cooking fuel |
| | 6. Toilet |
| | 7. Water |
| | 8. Electricity |
| | 9. Floor |
| | 10. Assets |

- Each dimension and each indicator within a dimension is equally weighted.
- The lower and the index value of lesser the multidimensional poverty.

## Gross National Happiness (GNH)

- The term 'Gross National Happiness' was coined in 1972, by Bhutan's then King **Jigme Singye Wangchuck**.
- GNH was designed in on attempt to define an indicator that measures quality of life or social progress in more holistic and psychological terms than the economic indicator of GDP. It is not measured directly, but only by the factors, which are believed to lead to it.
- A second-generation GNH concept, treating happiness as a socio- economic development metric was proposed in 2006, by **Med Jones.**

*GNH value is proposed to be an index function of the total average per capita of the following measures*:

— Economic wellness
— Environmental Wellness
— Physical wellness
— Mental wellness
— Workplace wellness
— Social wellness
— Political wellness

## Genuine Progress Indicator (GPI)

- The GPI is a concept in green economics and welfare economics. A GPI attempts to measure whether or not a country's increased production of goods and expanding services have actually resulted in the improvement of welfare of the people of the country. Genuine Progress Indicator refers to the concept of a quantitative measurement of well-being and happiness.
- The two measures of GPI and GNH are both motivated by the notion that subjective measures like well-being, are more relevant and important than more objective measures like consumption.

## Global Hunger Index (GHI)

- GHI is designed to measure and track hunger globally and by country and region. It is calculated each year by the International Food Policy Research Institute (IFPRI).
- The Global Hunger Index (GHI) was first released by IFPRI in 2006.

**GHI Index, 2021**

GHI 2020 was published in October 2021. It comprehensively measures and track hunger at the global, regional and country level. It was prepared jointly by global NGOs namely, Concern Worldwide (Ireland) and Welt Hunger Hilfe (Germany).

In order to reflect the multi-dimensional nature of the hunger, the GHI 2021 combines the following four components/indicators into one index.

1. Undernourishment (Insufficient calorie intake)
2. Child wasting (Low weight for their height)
3. Child stunting (Low height for their age)
4. Child mortality (Under the age of five)

India with a score of 27.5 in this index ranked 101 out of 107 countries. Hunger level in India has been characterised as serious'.

### Green Gross Domestic Product (Green GDP)

- Green GDP is an index of economic growth with the environmental consequences of that growth factored in.
- Green GDP monetises the loss of biodiversity and accounts for costs caused by climate change. Some environmental experts prefer physical indicators (such as waste per capita or carbon dioxide emissions per year), which may be aggregated to indices such as the Sustainable Development Index.

## Sustainable Development Index (SDI)

- The sustainable development is defined as the **development to achieve the needs** of present generation without compromising future generations need.
- Sustainable development ensures the well-being of individual by integrating social development, economic development and environmental conservation and protection.
- The challenges of sustainable development are population, poverty, inequality, the shortage of drinking water, human health, consumption of energy, deforestation and petrol consumption.

## Human Sustainable Development Index (HSDI)

- HSDI was developed in 2010, by independent economists. HSDI attempts to measure the overall quality of life by factoring in a fourth parameter-**per capita carbon emission** to the existing HDI. According to HSDI, the top five countries are Norway, followed by New Zealand, Sweden, Switzerland and France.

## National Prosperity Index (NPI)

NPI is a standard measure of social and economic development. Its three components are as follows

(i) GDP growth rate
(ii) Improvement in the quality of life.
(iii) Use of cultural heritage based on a value system in each area of life.

Former President APJ Abdul Kalam said that the country's economic growth should always be guided by 'National Prosperity Index' that includes components like improvement of quality of life and adoption of a value system derived from our ancient civilisation besides GDP. **SAARC prosperity Index** idea is given by Abdul Kalam on the basis of NPI.

**Human Capital Index Report 2020**

World Bank released the report titled "The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19" in September, 2020. The Human Capital Index (HCI) 2020 is a collaboration between the Human Development Practice Group and the Development Economics Group of the World Bank. India has been ranked at the 116th position among 174 countries in the Human Capital Index 2020. Last year India was ranked 115 out of 157 countries. The country of Singapore topped the score with 0.88 followed by Hong Kong and Japan in this index of 2020.

## Millennium Development Goals (MDGs)

MDGs were eventuated at the UNs Millennium Summit, 2000, where the world leaders of 189 UN Member States (193 currently) agreed on a set of quantifiable and monitorable goals for development and poverty eradication to be achieved by 2015.

### MDGs Report, 2015

UN released the Global Report on MDGs. NITI Aayog released the Asia-Pacific MDGs Report, 2015. India has managed to reduce its extreme poverty incidence to a half from 49.4% in 1994 to 24.7% in 2011. The report set the limit for extreme poverty as those living on $ 1.25 or less a day.

### New Global Goals

The United Nations General Assembly (UNGA) formally adopted the 2030 Agenda for sustainable development on 26th September, 2015, along with a set of bold new Global Goals. The 193 members GA adopted the new framework, "Transforming Our World: the 2030 Agenda for Sustainable Development," composed of 17Goals and 169 targets to wipe out poverty, fight inequality and tackle climate change over the next 15 years. Ambitious 17 goals are–no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequality.

Sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and strong institution and partnership for the goals.

## Different Levels of Economic Development

### Developing Country

- A developing country is a country, that has not reached the Western style standard of democratic government, free market economy, industrialisation, social programmes' and human rights guarantees for their citizens.

### Newly Industrialised Countries (NIC)

- The word NIC is used for those countries, which have more advanced economy than other developing nations, but which have not yet fully demonstrated the signs of a developed country.

### Emerging Markets

- These are countries with social or business activity in the process of rapid growth and industrialisation. Many of the countries like India and China, earlier considered to be emerging are now said to have emerged and the term is considered to be outdated by many.

# Economy and Environment

- Natural and environmental resources have three economic roles: waste disposal services related to the environment's assimilative capacity, natural resource inputs into production and directly consumed life support services and aesthetic amenities.
- The natural and environmental resource input function is central to understanding the relationship between economic growth and environment.

## Sustainable Development

- Economic development without environmental considerations can cause serious environmental damage, in turn, impairing the quality of life of present and future generations. Sustainable development attempts to strike a balance between the demands of the economic development and the need for protection of the environment.
- It seeks to combine the elements of economic efficiency, intergenerational equity, social concerns and environmental protection. Although, the term 'sustainable development' has many interpretations, it generally refers to non-declining human wellbeing over time.
- Sustainable development was defined by the Brundtland Commission (1987) as the meeting of the needs of the present without compromising the ability of future generations to meet their own needs.'

### Need of Sustainable Development

- The concept of sustainable development aims at maximising the net benefits of economic activities, subject to maintaining the stock of productive assets (physical, human and environmental) over time and providing a social safety net to meet the basic needs of the poor.
- Sustainable development, therefore, attempts to accelerate development in an environmentally responsible manner keeping in mind the intergenerational equity requirements.
- The spirit of the conference was captured by the expression **Harmony with Nature**, brought into the fore with the first principle of the Rio Declaration: 'Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.'
- In 1993, UNCED instituted the **Commission on Sustainable Development** (CSD) to follow-up on the implementation of Agenda 21.
- In 2002, 10 years after the Rio Declaration, a follow-up conference, the **World Summit on Sustainable Development** (WSSD) was convened in Johannesburg, to renew the global commitment to sustainable development. The conference agreed on the **Johannesburg Plan of Implementation** (JPoI) and further tasked the CSD to follow-up on the implementation of sustainable development.
- In December, 2009, the UN General Assembly adopted a resolution agreeing to hold the United Nations Conference on Sustainable Development (UNCSD), also referred to as '**Rio+20 or Rio 20**'.
- In 2012, the member States have agreed on the following two themes for the conference : Green economy within the context of sustainable development and poverty eradication and Institutional framework for sustainable development.

- ***Strong Sustainability Rule*** *is a rule, which requires a separate preservation of each category of critical asset, assuming these to be complements rather than substitutes.*
- ***Weak Sustainability Rule*** *is a rule, which seeks to maintain the aggregate monetary value of the total stock of assets, assuming a high degree of substitutability among the various asset types.*

## Measuring India's Environmental Performance

- In a ranking of Environmental Performance Index EPI 2020 was placed 168th out of 180 countries.
- The EPI exercise is nevertheless, useful in flagging some areas of concern. India should do better on public health and environmentally preventable child mortality, as has Bangladesh.
- India was at second position after Pakistan on climate change among South-Asia countries. India's performance in air quality is disappointing. Delhi is always in the news for its poor air quality. India's total forest cover has registered a 0.2% increase between 2015 and 2017.

# Environmental Taxes

- As against the command and control approach to management of the environment, the economic or Market Based Instruments (MBIs) approach sends economic signals to the polluters to modify their behaviour.
- The approach normally involves financial transfers between polluters and the community and affects relative prices. But the polluters have freedom to respond and adjust, in the manner they want. They can, thus, choose the least cost option to meet the requirements.
- Hence, it is considered to be an efficient approach compared to the approach based on standards and regulations. The MBIs, therefore, have the benefit of being flexible and cost effective providing incentives for dynamic efficiency and resource transfer 12th Five Year Plan and sustainability.

## Carbon Tax

- India has cut subsidies and increased taxes on fossil fuels (Petrol and Diesel) turning a carbon subsidy regime into one of carbon taxation. This has significantly increased petrol and diesel price while reducing annual $CO_2$ emissions. Excise duties on petrol or diesel also act as an implicit carbon tax by putting an effecting price on emissions. The Government of India revised its coal cess from ₹ 50 per ton to ₹ 100 per ton.

# 12th Five Year Plan and Sustainability

- The 12th Five Year Plan was the first time Five Year Plan has sustainability as a prominent focus and appreciates its emphasis on low carbon growth strategies.

## Monitorable Targets for the 12th Plan

- To increase forest and free cover by 5% points.
- To improve forest production and maintain biodiversity.
- To clean all critically polluted rivers by 2020.
- To reduce 20-25% energy use per unit of GDP by 2020.
- To reclaim wetlands/island lakes/ponds by 2017.

### Green Accounting

Green accounting is focused on addressing deficiencies in conventional accounts with respect to the environment. Integrated environment and economic (green) accounting, therefore, attempts at accounting for both socio-economic performance and its environmental effects and integrating environmental concerns into mainstream economic planning and policies.

Such integrated accounts can be useful in assessing the sustainability of economic growth and also the structural distortion of the economy by environmentally unsound production and consumption patterns.

# Self Check

## Build Your Confidence

**1.** Consider the following statements
1. Economic development is a broader and normative concept. It concerns with structural change in economy.
2. Economic growth is a narrow concept. It concerns with increase in the economy's output.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) None of these

**2.** Consider the following statements about Human Development Index
1. World Bank introduced the Human Development Index.
2. India is a medium human development country.
3. Among the BRICS countries, Russia stands first in the HDI rank.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) 1 and 2
(c) 2 and 3 (d) All of these

**3.** Which of the following could to have prevented the 'trickle down' effects in Indian economy?
1. Increased dependence of agriculture on purchased inputs and privately managed irrigation.
2. More employment of labour by larger landholding farmers.
3. Lowered participation women in agricultural workforce due to new technology.
4. The failure of the Green Revolution.

*Select the correct answer using the codes given below*

(a) 1 and 2 (b) 2 and 3
(c) 1 and 3 (d) 2 and 4

**4.** Consider the following statements
1. Gender Inequality Index contains three dimensions reproductive health, empowerment and labour market.
2. It reflects women's disadvantage in health, empowerment and labour market.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) None of these

**5.** Consider the following statements
1. Global Peace Index is a brain child of Steve Kilelea.
2. Gross National Happiness is a brain child of Jigme Singye Wangchuck.

*Which of the statement(s) given above is/are correct?*

(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) None of the above

**6.** Consider the following statements
1. The term 'Trickle Down Effect' was coined by Ronald Regan.
2. Kyznets Curve shows relations between inequality and capita income.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) None of these

**7.** Consider the following statements
1. More than one-third of world population lives in low income countries.
2. More than three quarters of the Gross National Income of the world is accounted for by the high income economy countries.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) Neither 1 nor 2

**8.** Human Poverty Index (HPI) developed by UNDP is based on which of the following deprivations?
1. Income deprivation 2. Literacy deprivation
3. Social services deprivation 4. Employment deprivation

*Select the correct answer using the codes given below*

(a) 2 and 3 (b) 1, 3 and 4
(c) 1, 2 and 4 (d) All of these

**9.** Consider the following statements
1. The term 'Gross National Happiness' (GNH) was coined in 1972, by Bhutan's then King Jigme Singye Wangchuck.
2. A second-generation GNH concept, treating happiness as a socio-economic development metric was proposed in 2006, by Med Jones.

*Which of the statement(s) given above is/are correct?*

(a) Only 1 (b) Only 2
(c) 1 and 2 (d) None of these

**10.** Which one of the following indicators is not used in the determination of Gender Development Index (GDI) in the Human Development Report (HDR)? **[UPPCS 2008]**

(a) Life expectancy of female
(b) Female adult literacy and gross enrollment
(c) Female political empowerment
(d) Female per capita income

**11.** Economic growth in country X will necessarily have to occur if **[UPSC 2013]**

(a) there is technical progress in the world economy
(b) there is population growth in X
(c) there is capital formation in X
(d) the volume of trade grows in the world economy

**1.** (c) **2.** (c) **3.** (c) **4.** (c) **5.** (c) **6.** (c) **7.** (c) **8.** (b) **9.** (c) **10.** (c) **11.** (c)

# Chapter four
# Economic Planning in India

*Planning involves acceptance of a clearly defined set of objectives in terms of which to frame overall policies, formulation of a strategy for promoting the realisation of the ends defined and working out a rational solution to problems—an attempt to coordinate means and ends.*

## Meaning of Economic Planning

- Economic planning refers to the path of actions in terms of policy measures to be followed in future, in pursuance of pre-determined objectives.
- Planning Commission (now NITI Aayog) defines economic planning as the utilisation of country's resources for developmental activities in accordance with national priorities. It is a consciously and judiciously carried out process for optimum utilisation of existing resources in order to fulfil some well defined objectives.

## Objectives of Planning

*The broad objectives of Five Year Plans in India are as follows:*

- **A high rate of growth** with a view to improvement in standard of living.
- **Modernisation** of economy in terms of adoption of new technologies and social outlook.
- **Economic self-reliance** meaning avoiding import which can be produced in India.
- **Equity** implying equitable distribution of wealth with social justice.
- **Economic stability,** which means controlling inflation and unemployment.

## Strategies of Planning

### Harrod Domar Strategy

- The first Five Year Plan (1951-56) was based on this strategy. This strategy emphasised the role of capital accumulation's dual character, which on the one hand, increases the national income (demand side role) and on the other hand, increases the production capacity (supply side role).
- According to this growth model, the rate of economic growth in an economy is dependent on the level of savings and capital output ratio.

### Nehru-Mahalanobis Strategy

- This strategy was a two sector model, that is, consumer good sector and capital good sector. The strategy emphasised investment in heavy industry to achieve industrialisation for rapid economic development. It was based on the Russian experience.
- The objective was to become self-reliant and overcome capital constraint. This strategy was adopted in the Second Five Year Plan (1956-61) and with minor modifications, up to the Fifth Plan. It was a long-term strategy.
- It is also referred as planning by inducement as against imperative planning.

## Gandhian Strategy

- It was enunciated by **Acharya Shriman Narayan Agarwal** in his 'Gandhian Plan' in 1944. The basic objective of the Gandhian Model is to raise the material as well as cultural level of the masses so as to provide a basic standard of life.
- It laid emphasis on scientific development of agriculture and rapid growth of cottage and village industries. Moreover, Gandhian strategy emphasised on employment oriented planning rather than production oriented planning of Nehru.

## LPG Strategy

- Liberalisation, Privatisation and Globalisation (LPG) strategy of planning was introduced by the Finance Minister, Dr Manmohan Singh under Narasimha Rao government in 1991.
- The strategy ended the 'license-permit-raj' and opened the hitherto areas reserved for the public sector to private sector. It allowed for foreign direct investment and followed an export promotion policy to boost economic growth. In all, it changed the nature of planning from centralised to 'indicative', wherein planning was to play a facilitating role.
- It is also referred to as planning by inducement as against imperative planning.

# History of Planning in India

- First attempt to initiate economic planning in India was made by M Visvesvaraya, a noted engineer and politician, in 1934, through his book, *Planned Economy for India.*
- In 1938, National Planning commission was set-up under the Chairmanship of Jawaharlal Nehru by the Indian National Congress.
- Its recommendations could not be implemented because of the beginning of the World War II and changes in the Indian political situation.
- It stated that the objective of planning was to ensure an adequate standard of living for the masses. It emphasised heavy industry and land reforms.
- In 1944, Bombay plan was presented by 8 leading industrialists of Bombay including JRD Tata, GD Birla and others.
- It saw future progress based on textile and consumer industries and saw an important role for the state in post independent India.
- In 1945, People's Plan was given by MN Roy.
- In 1950, Sarvodaya plan was given by Jai Prakash Narayan. A few recommendations of this plan were accepted by the government.

# National Institution for Transforming India (NITI) Aayog

- National Institution for Transforming India (NITI) Aayog is a policy 'think-tank' of government that replaces Planning commission and aims to involve states in economic policy-making. It will be providing strategic and technical advice to the Central and the State Governments. Prime Minister heads the Aayog as its Chairman.
- It was formed via a resolution of the Union Cabinet on 1st January 2015 for providing directional and policy inputs, designing strategic and long term policies, programmes, advising Centre, States and Union Territories on technical aspect. It acts as the quintessential platform of the Government of India to bring the states to act together in national interests and thereby fosters cooperative federalism.

## NITI Aayog-Composition

- NITI Aayog is headed by the Prime Minister and it consists of a governing council, comprising Chief Ministers of states and Heads of all Union Territories. The Governing council replaces the earlier National Development council.
- In addition, there will also be a regional council comprising of Chief Ministers and Lieutenant Governors of Union Territories, which will be mandated to develop plans that are region specific.
- The Aayog have 7-8 full time members and two well-known and accomplished part-time members, drawn from leading research organisations and major universities. Four Union Ministers, nominated by the Prime Minister, are also be included in ex-officio capacity.
- On the PM's invitation, specialists across domains, will be invited to share knowledge and add value to the planning process, making extensive use of technology in developing sustainable plans and programme implementation. The Prime Minister shall appoint a full time Chief Executive Officer with a fixed tenure and may sanction a dedicated secretariat, if deemed necessary.

# Planning Commission

- After independence in 1950, the Planning commission was set-up under the Chairmanship of Pt Jawaharlal Nehru. It was to formulate plans for the economic development of the country on the basis of the available physical, capital and human resources.
- The Planning commission was essentially a non-political and non-constitutional advisory body, which makes recommendations to the government. It was set-up through an executive order of the Union Government on 15th March, 1950.

### Differences between NITI Aayog and Planning Commission

| Parameter | NITI Aayog | Planning Commission |
|---|---|---|
| Financial Clout | To be an advisory body or a think-tank. The powers to allocate funds might be vested in the Finance ministry. | Enjoyed the powers to allocate funds to ministries and State Governments. |
| Full-time Members | The number of full-time members could be fewer than Planning commission. | The last commission had eight full-time members. |
| States Role | State Government are expected to play a more significant role than they did in the Planning commission. | States role was limited to the National Development council and annual interaction during plan meetings. |
| Member Secretary | To be known at the CEO and to be appointed by the Prime Minister. | Secretaries or Member Secretaries were appointed through the usual process. |
| Part-time Members | To have a number of part-time members, depending on the need from time- to- time. | Full Planning commission had no provision for part-time members. |

# 15 Years Vision Document in Place of Five Year Plan

- The newly elected NDA government in 2014 decided to discontinue the Five Year Plan and replace it with 15 Year Vision Document. The first 15 Year Vision Document will come into effect from 2017-18 after the end of the 12th Five Year Plan. It will be formulated with central objective of eradication of poverty. It will come alongwith a 7 year National Development Agenda which will lay down the programmes, schemes and strategies to achieve a long term vision. The long vision document (Perspective plan) will comprise three year mass economic framework.
- **2017-18 to 2032-33** Vision Document
- **2017-18 to 2024-25** National Development Agenda
- **2017-18 to 2019-20** Three Year Action Agenda (to be repeated after every three year)

# National Development Council (NDC)

- The National Development Council (NDC) is neither a constitutional body nor a statutory body. Union Cabinet set-up NDC in 1952, through an executive order.
- National Development Council (NDC) is mainly concerned with approval of Five Year Plans. The NDC is headed by the Prime Minister and consists of the Central Ministers, Chief Ministers of the State and Lt Governors, Administrators of Union Territories and Members of the Planning commission.
- The Secretary of the Planning commission acts as the Secretary of the Council. From a strictly legal point of view, NDC is essentially an advisory body.

# Five Year Plans in India

- After independence, India launched a programme of Five Year Plans to make the optimum use of country's available resources and to achieve rapid economic development.
- In India, development plans were formulated and carried out within the framework of the mixed economy.
- In India, Economic planning was adopted in the form of Five Year Plans and was seen as a development tool on account of various reasons.

  *These are:*

  —Limitations of market mechanism in view of the existing economic backwardness of India at the time of independence.

  —The need for social justice as experience of the past five and-a-half decades suggests that in a free enterprise economy, economic gains do not necessarily trickle down.

  —**Judicious mobilisation** and allocation of resources in the context of overall development programme in the light of the resource constraint in India.
- So far, Twelfth Five Year plans have been formulated since, the year 1951. Twelfth Five Year Plan (2012-2017), came into force once it was approved by the NDC on 27th December, 2012.