INTRODUCTION

Economics :

- Economics is a social science which deals with human wants and their satisfaction. It is mainly concerned with the way in which a society chooses to employ its scarce resources which have alternative uses, for the production of goods for present and future consumption. It is simply defined as science of production distribution and consumption.
- Political economy is another name for economics. "Polis" in Greek means a State.

Definitions of Economics :

1. Adam Smith's Wealth Definition :
   - ✓ He defined, "Economics is the science of wealth".
   - ✓ Book - Wealth of Nations - 1776
   - ✓ He is known as the Father of Economics.(Political Economy).

2. Alfred Marshall's Welfare Definition:
   - ✓ He defined economics as "a study of man's actions in the ordinary business of life".
   - ✓ Book - Principles of Economics.

3. Lionel Robbins' Scarcity Definition:
   - ✓ He defined "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses ".
   - ✓ Book - An Essay on the Nature and significance of Economic Science.

4. Samuelson's Modern Definition of Economics :
   - ✓ He defined, "Economics is a social science concerned chiefly with the way society chooses to employ its resources, which have alternative uses, to produce goods and services for present and future consumption".
   - ✓ He has coined the concept of Net Economic Welfare.

Net Economic Welfare :

- It is an adjusted measure of total national output that includes only consumption and investment items that contribute directly to economic welfare.

Ancient Economic Thought:

- Valluvar's economic ideas are found mostly in the second part of the Thirukkural, the Porutpal or the part dealing with wealth.

- Amarthya Sen was the first Indian to receive Noble Prize in 1998 for his work on welfare Economics.

- Kautilya's economic thought was mentioned in his book Arthasastra.

Modern Economic Thought :

Mercantilism :

- Mercantilism was a policy of power.
- It was followed by European governments between 15th and 18th century.

The Physiocracy / Physiocrate

- The term 'physiocracy' means 'Rule of Nature'.
- Physiocracy was essentially a revolt by the French against mercantilism.
- They advocated laissez–faire.(non-interference by the governments in the economic system)

Classical school :

- Adam smith (first development economist) was interested in the nature and causes of the wealth of nations.
- Ricardo was interested in the problems of distribution.
- Malthus, who gave the theory of population was interested in finding out why some countries were prosperous at one time and why they were poor at other times.
- J.S. Mill believed in individualism as well as socialism and also advocated socialist reforms in distribution as the laws of distribution were different from the laws of production.

The Historical school :

- It was a revolt against the classical school.
- It advocated protection for new industries through tariffs.
- It was dominant in Germany during the second half of the 19th century.

Marxism :

- Karl Marx is considered as the Father of (scientific) socialism.
- According to Marx, "all history is a history of class struggle".
- His teachings resulted in the birth of a socialist State in Russia and China.

The Institutional school :

- It emphasizes the role of institutions in economic life.
- It is of American origin.
- J.A. Schumpeter considered economic life mainly as a process of change and development.

The Keynesian Revolution :

- Father of new economics - John Maynard Keynes.
- Keynes suggested a greater role for government and a bold fiscal policy to tide over the crisis during great depression (1920-1930).
- The New Deal policy of America was greatly influenced by Keynesian policy.

Basic Divisions in Economics :

1. Production
2. Distribution
3. Consumption
4. Exchange

1. Production :

- ❖ Production refers to the creation of wealth.
- ❖ It deals with all activities which are undertaken to produce goods which satisfy human wants.

Factors of Production:

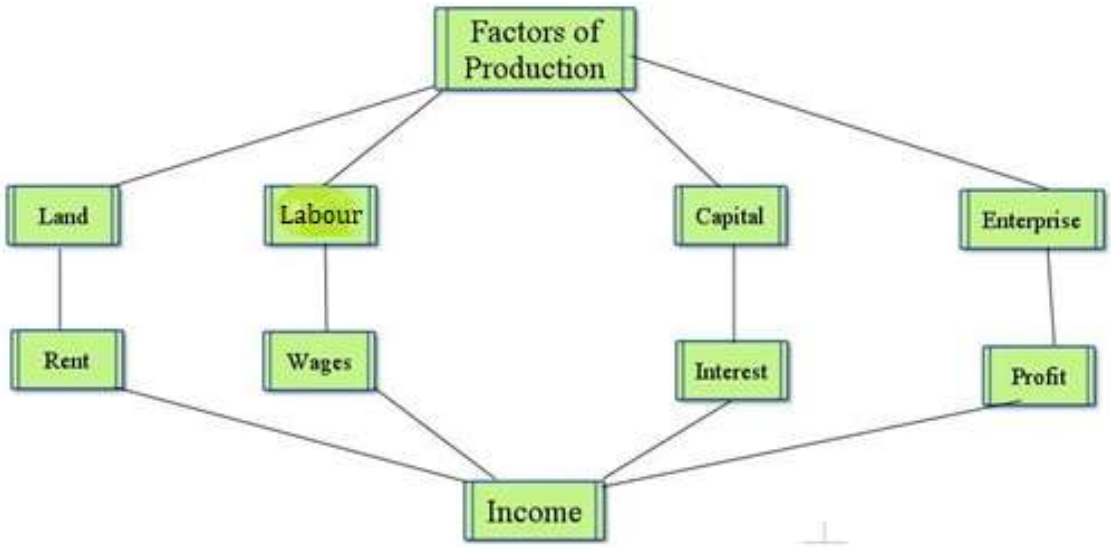
1. Land
2. Labour
3. Capital
4. Entrepreneur / organization

2. Distribution :

- ❖ An act of sharing the products to the consumer.

3. Consumption :

- ❖ Consumption deals with the satisfaction of human wants. When a want is satisfied, the process is known as consumption.



4. Exchange :

- ❖ An act of giving one thing and receiving another in return.
- ❖ If Goods are exchanged for Goods, we call it barter.

Divisions of Economic theory:

Macroeconomics :

- ✓ Macroeconomics studies the economic system as a whole.
- ✓ It is a study of the relations between broad economic aggregates such as total employment, saving and investment.

Micro economics :

- ✓ In microeconomics, we deal with problems such as the output of a single firm or industry, price of a single commodity and spending on Goods by a single household.

Types of Economy:

- ✓ Open Economy – Free from trade barriers. (free export & import)
- ✓ Closed Economy – No activity conducted outside the Economy.

Sectors:

1. Primary (Raw materials/ Natural): Agriculture, Forestry, Fishing.

- *The Nobel Prize in Economic Science was established by Sweden's central bank in 1968.*

2. Secondary (Manufacturing) : Mining, Manufacturing, Electricity, gas and water supply, construction.
3. Tertiary (Service): Business, Transport, Banking, Tele communication, Real Estate etc..,

Economic Systems:

- ❖ Economic system refers to the way in which resources are allocated in the economy.

Economic system can be classified into:

1. **Traditional economy on Self contained economy :**
   - ✓ This type of economy which are governed by customs and conventions.
   - ✓ It is also called village economy or closed economy.
2. **Capitalist economy or Market economy :**
   - ✓ It is an economic system in which the production and distribution of commodities take place through the mechanism of free markets without the government interferences.
   - ✓ Hence it is also called as market economy or free trade economy.
   - ✓ Eg: United States, Canada, Great Britain.
3. **Socialist economy or Command economy :**
   - ✓ It is an economic system in which the means of production are owned and operated by the State.
   - ✓ All decisions regarding production and distribution are taken by the central planning authority.
   - ✓ Hence it is also called as planned economy.
   - ✓ E.g: China, Vietnam, Laos, Cuba and North Korea.
4. **Mixed economy :**
   - ✓ Mixed economy is one in which both public and private sectors co-exist.
   - ✓ In the real world no economy is a pure traditional economy, a pure capitalist economy or a pure socialist economy.
   - ✓ E.g: India.

Basic terms and concepts in Economics:

1. Market: It is a place where goods are bought and sold.
2. Trade: Buying and selling of commodities.
3. Wealth : Stock of goods existing at a given time that have money value
4. Goods: Anything that satisfies a human want can be considered as "good" in economics. It refer to material and non-material things.
5. Value: The term "value" refers to the exchange qualities of a good. It is generally measured in money
6. Price: When value is expressed in money, it is called price.

7. Labour : It refers to any work undertaken for securing an income or rewards. It is the employer of capital.
8. Capital : It refers to part of man-made wealth which is used for the further production of wealth.
9. Entrepreneur : It is a person who combines the different factors of production, in the right proportion and initiates the process of production and also bears the risks .

Econometrics : It is the application of statistical and mathematical theories in economics.

Some Important Books on Economics

The Wealth of Nations	**Adam Smith**
Money illusion	Irwin Fisher
Capital and Growth	Hicks
Central Theory of Employment, Interest and Money	J.M. Keynes
Planned Economy for India	M. Vishveshwaraiya
The Value and Capital	Hicks
The Canon (theory) of Consumer's Surplus	Marshall
Big Push Theory	A.R. Rodon
Datt & Sundharam Indian Economy	Gaurav Datt and Ashwani Mahajan

Adam Smith is the father of modern capitalism

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BASIC FEATURES OF INDIAN ECONOMY

Characteristics of Indian Economy

❖ Main Characteristics and various aspects of Indian Economy are:

1. **Agrarian Economy :** Even after six-decades of independence, 48.9% of the work force of India is still agriculturist and its contribution to National Income in 2013-14 is 13.9% / 2017-18 = 16.4%
2. **Mixed Economy :** Indian Economy is a unique blend of public and private sector, i.e. a mixed economy. After liberalisation, Indian Economy is going ahead as a capitalist economy or market economy.
3. **Developing Economy :** The following facts show that Indian Economy is a developing economy :
   (a) **National Income :** (is the net national income of factor cost) of India during 2013-14 at current prices is estimated at ₹ 92.4 lakh crore and at constant (2004-05) prices, at 49.3 lakh crore.
   At constant (2004-05) prices, the National Income has shown a growth of 4.2%, while at current prices the growth rate of national Income is 11.9%.
   (b) According to Planning commission of India's report, India has 27 crore people or 21.9% population living below *Poverty Line (as on 31st March 2012).*

> **BPL:** According to the Rangarajan Committee, 30.95% people in rural areas and 26.4% in urban areas (as compared to 25.7% and 13.7% respectively as per the Tendulkar Methodology were below the poverty line in 2011-12.
> Source : The IE 4 July 2015.

   (c) Level of unemployment is very high. Unemployment in India is mainly structural in nature because the productive capacity is inadequate to create sufficient number of jobs.
   There is an acute problem of disguised unemployment in the rural areas.

A person is considered employed if he/she works for 273 days of a year for eight hours every day.

   (d) Savings are low in India due to low national income and high consumption expenditure. The low savings results in shortage of

The term capitalism was introduced by Karl Marx.

capital formation. Capital is an important factor of production.

(e) India is the second most populated country of the world. During 2001-2011, population increased by 17.69%. With this high growth rate of population about 1.83 crore new persons are being added to Indian population every year. According to 2011 census, the total Indian population stands at a high level of 121.07 crore which is 17.5% of the world's total population. To maintain 17.5% of world population India holds only 2.42% of total land area of the world.

(f) India lacks in large industrialisation based on modern and advanced technology which fails to accelerate the pace of development in the economy.

Important facts relating to characteristics of Indian Economy

- Primary sector of Indian Economy is agriculture and the related sectors.
- Secondary sector of Indian Economy is related to industry, manufacturing electricity etc.
- Tertiary sector of Indian Economy is related to business, transport, communication and services.
- The best indicator of economic development of any country is per capital income.
- The following factors are important in Economic Development of a developing country **:**

1. Natural resources,
2. Capital gain,
3. Skilled labour force,
4. Surplus sale of agriculture,
5. Justified social organisation,
6. Political freedom,
7. Freedom from corruption,
8. Technological knowledge and general education.

The Sabbath (weekly day of rest concept was introduced by Hebrews (Israelites).

Three Sectors of Indian Economy as Divided by CSO

Primary Sector	*Secondary Sector*	*Tertiary Sector*
It is involved in agriculture and direct use of natural resources	It is involved in the large-scale processing of natural resources; aimed at value addition	It is involved in supporting the activities of primary and secondary sectors

Ex : Farming, Apiculture, Cattle Farming, etc.	Ex : Iron and steel industry, sugar mills, shoe factory, etc.	Ex : Banking transportation, BPO, consultancy, etc.

I. NATURAL RESOURCES

Guiding Principles of Resource Development:

a. Economic use of resources to achieve minimum waste

b. Sustained use through conservation of renewable resources.

c. Multi-purpose use of resources

d. Integrated planning in the use of resources

e. Location of industries with a view to minimize transportation cost

f. Exploitation of natural resources should not result in disturbance of ecological balance.

A. Land

- Indian measures 3,214 km. from north to south and 2,933 km. from east to west with a total land area of 32,87,263 square kms., and a coastline measuring 7516.5 km.
- It is the seventh largest landowner in the world after Russia, Canada, China, the U.S.A., Brazil and Australia in that order. In brief, India is a vast country and has a considerable strategic significance on account of its location, size and economic resources.
- Standing at the heart of the Indian Ocean, the country is in a much better position than any other in that area to control the Indian Ocean routes, most of which touch the Indian ports.
- Most of the air routes between Europe, West Asia and Africa and East Asia, South East Asia and Japan also pass through India.
- It gives India an advantage in terms of international mobility of persons and commodities.
- India has a land frontier of 15200 kms and occupies 2.42 percentage of world area.

B. Water resources

- Water is the most important source of energy in the Indian economy.
- About 25 per cent of electricity generated in the economy is from the Tidal sources.

- The other important use of water is in irrigation. The irrigation potential through major, medium and minor irrigation projects has increased from 22.6 million hectares in 1951 to 102.77 million hectares (mha) at the end of 10th plan.
- In a country where agriculture gives twists and turns to the whole economy, provision of water can make all the difference; it can either stimulate the economic activity or depress it altogether.
- The important sources of water can be classified into two parts; (i) surface water and (ii) ground water. Surface water is available from such sources as rivers, lakes etc. Ground water is available from wells, springs etc.
- The rivers in India may be classified as
  (i) The Himalayan rivers
  (ii) Deccan rivers
  (iii) Coastal streams and
  (iv) Rivers of the inland drainage system.
- The Himalayan Rivers are generally snow fed and have, therefore a continuous flow throughout the year.
- During the monsoon months, the Himalayas receive a very heavy rainfall and the rivers discharge the maximum amount of water causing frequent floods. The Deccan Rivers are generally rain-fed and therefore fluctuate in volume.
- The Ministry of Water Resources lays down the policies and programmes for development and regulation of the country's water resources.
- The National Water Policy, 2002 lays emphasis on integrated water resources development and management for optimal and sustainable utilization of the available surface and ground water.

C. Forest Resources

- Forest produces the requisite raw materials for industries, defence, communication, domestic use and other public purposes.
- They contribute to the country's exports and create a large volume of employment in the

primary, secondary and tertiary sectors.

- ❖ They also provide materials like fuel wood, small timber, fodder, etc. for direct use by the agriculturists.
- ❖ The benefits from forests in the matter of soil conservation, recreation, wildlife, etc., have been well recognized.

M. Vishveshwarya, CE. Real GDP

Forest Report – 2011

- ❖ The Forest Survey of India (FSI) has been publishing a series of biennial assessment reports of the forest cover in the country, since 1987.
- ❖ The India State of Forest Report 2011, is the twelfth report in the series.
  - As per the present assessment, the forest and tree cover of the country is 78.29 million hectare, which is 23.81% of the geographical area of the country.
  - In comparison to the 2009 assessment, after taking into account the interpretational changes, there is a decrease of 367 sq km in country's forest cover.
  - The State of Madhya Pradesh has the largest forest cover in the country, as 77700 sq. km, followed by Arunachal Pradesh at 67410 sq.km.

D. Mineral Resources

- ❖ The mineral resources of India encompass a wide range of products that are necessary for a modern developed economy.
- ❖ There are, according to the Geological Survey of India, 50 important minerals and 400 major sites where these minerals occur.
- ❖ These can be divided into four categories as follows.
  - **a.** Minerals of which India's exportable surplus can dominate the world market; to this category belong iron-ore and mica;
  - **b.** Minerals of which the exportable surplus forms an important factor; these include manganese ore, bauxite, gypsum and others;
  - **c.** Minerals in which it appears that the country is self-sufficient, like coal, sodium salts, glass sand, phosphates etc.

d. Minerals for which India has to depend largely or entirely on foreign markets like copper, nickel, petroleum, lead, zinc, tin, mercury, platinum, graphite, etc.

e. The various minerals can also be classified into three categories on the basis of their nature and end use. These three categories are:

- Fuels like coal, lignite, natural gas and petroleum
- Metallic minerals like bauxite, iron-ore, manganese etc.
- Non-metallic minerals like phosphorous, graphite, gypsum, limestone, mica etc.

Engineers day – Sep 15

National Mineral Policy, 2008

- The new NMP was approved by the government on March 13, 2008. It is based on the recommendations of the Anwarul Hooda Committee.
- The new NMP enunciates measures like assured right to next stage mineral concession, transferability of mineral concessions and transparency in allotment of concessions, in order to reduce delays, which are seen as impediments to investment and technology flows in the mining sector in India.
- The Mining Policy also seeks to develop a sustainable framework for optimum utilization of the country's natural mineral resources for the industrial growth in the country and at the same time improving the life of people living in the mining areas, which are generally located in the backward and tribal region of the country.

E. ENERGY Resources

- The need for energy in a developing economy can hardly be over-emphasized.
- It is a basic input required to sustain economic growth and to provide basic amenities of life to the entire population of a country. It is energy, which is the dividing line between a subsistence economy and a highly developed economy. India is the 7th largest producer and 5th largest consumer of energy in the world.

- Energy in India is produced from different sources. These can be classified into two groups. (i) Commercial Sources – like thermal power, hydro power, power from oil, gas, nuclear, etc. and (ii) non-commercial sources like firewood, dung-cake, etc. Of the two sets of sources, commercial sources occupy a more prominent position.
- The bulk of the commercial energy is consumed in the industrial sector followed by the transport and household sectors whereas a large part of the energy requirement in the rural and domestic sectors is met from non-commercial sources.

F. Natural Gas

- Natural gas has aptly been termed as the **Prince of Hydrocarbons.** It occurs either as associated gas or free gas. Associated gas is produced from underground reservoirs along with crude oil and the level of production depends entirely on the level of crude oil production.
- Contrary to that, free gas, though occurring in the underground reservoirs is not associated with crude oil and can be produced as required. Natural gas can be used for both domestic and industrial purposes.
- It finds application in the power, fertilizer and petrochemical industries.

G. Production and Consumption

- In India, exploration for oil and gas was taken up first in **1955** after the **ONGC** was formed on a national scale.
- Substantial reserves of gas have been located in different parts of the country, more important among which identified are Cambay basin, Upper Assam, Mumbai High, South Bassein and other areas of Indian Sedimentary Basin, such as Krishna-Godavari, Jaisalmer, Tripura, Cachar, Bengal and the Himalayan foothills. The geological reserves of gas have been estimated at 1,154 million tonnes (as oil equivalent) presently.

Acquisition of oil and gas assets abroad

- In view of the demand-supply gap in hydrocarbons, national oil companies are encouraged to pursue equity oil and gas opportunities overseas. Oil and Natural Gas Corporation Videsh Limited (OVL) produced about 8.78 million metric tonnes of oil and equivalent gas during the year 2008-09 from its assets abroad in Sudan, Vietnam, Russia, Syria and Colombia. In 2008, OVL acquired two oil blocks each in Brazil and Colombia.
- The largest ever acquisition of a foreign company, Imperial Energy Plc., UK (IEC) by an Indian Public Sector company, ONGC-Videsh Ltd., took place in 2008. Besides IECOVL-IOC alliance, BPCL along with Videocon, too have acquired oil assets abroad.

II. SALIENT FEATURES OF INDIAN ECONOMY

1. Low Income

- In India GNP (Gross National Product) per capita is Rs. 111,9191.63 billion in 2013-14 at market price, roughly one fourth of the population was below the poverty line.
- On world scale, income inequalities between the developed and underdeveloped countries are very large.
- According to the World Bank estimates, in 2010 the average GNP per capita of the high income economies was $38,685, whereas it was $ 510 in low income underdeveloped countries.

2. Predominance of Agriculture

- In India agriculture and allied sectors contribute nearly 13.7 percent of Gross Domestic Product (GDP) according to the 2013-14 estimates released by the Central Statistics Office (CSO).

Nominal GDP – India rank – 7th (in world level)

- Moreover, in India agriculture provides employment to around 50 per cent of the workforce.
- The share of income in agriculture is however, considerably less than the share of employment in

agriculture which clearly reflects the relatively low productivity per labour unit in the agricultural sector.

3. Rapid Population Growth Rate and High Dependency Ratio

- ❖ High population growth rate is also in indicator of under development.
- ❖ India's population growth rate was 1.64% per annum and 17.64% per decade during 2001-2011, which is still very high as compared to the developed economies.
- ❖ Dependency ratio refers to ratio of dependent population (non-working) to total population.
- ❖ In India dependency ratio is around 60% which is very high. This is because of high birth rate and social circumstances.

4. Mass Poverty

- ❖ According to United Nations Development Programme's (UNDP) Global Human Development Index 2013, India is ranked 135th among 187 countries. The report says 55.3 per cent of the Indians suffer from multidimensional poverty.
- ❖ The Planning Commission released the second India Human Development Report (HDR) 2013.
- ❖ The report claims that poverty, unemployment and child labour are declining.
- ❖ According to this report the absolute number of the poor (27 per cent) stood at 302 million as compared to 320 million in 1973. Poverty is widespread in the underdeveloped countries, though the major progress has been registered over the past 25 years, the absolute number of poor has in face increased.

5. Unemployment and Underemployment

- ❖ Unemployment is a phenomenon of all economies whether developed or underdeveloped.
- ❖ But nature and degree of unemployment is different in developed and underdeveloped economies.
- ❖ In developed economies most of the unemployment is cyclical which arises because of fluctuations in business cycles. In underdeveloped economies like India, chronic unemployment is found which

results from the structural defects in the economy.

- ❖ Moreover, underemployment is widespread in underdeveloped countries.
- ❖ Underemployment is a condition in which a person is getting work but not according to his/her capacity and qualifications.
- ❖ The 68th round (2011-2012) of NSSO survey on employment-unemployment indicates a creation of 4.68 million work opportunists between 2009-10 and 2011-12.
- ❖ The Twelfth Five Year Plan aims at generating 58 million work opportunities in twenty-one high growth sector.

6. Inequality

- ❖ Inequality in distribution of income and wealth is found in every country but this is much wider in underdeveloped economies.
- ❖ In India bottom 40% of rural population posses only 5% of rural assets while 8% top households posses 46% of total rural assets. This disparity is more intensive in urban areas.

7. Security of Capital

- ❖ Capital is considered as the most important factor in the development of an economy.
- ❖ In underdeveloped economies like India, capital availability per person is very low which results in low productivity and low per capita income.
- ❖ Low per capita income again results in low savings, low investment and low capital formation. Thus Underdeveloped Countries (UDCs) are caught in the grip of vicious circle of poverty.
- ❖ Lack of capital does not allow an economy to introduce the latest technologies. Thus, economy becomes technologically backward and internationally in competitive.

8. Low Level of Human Development

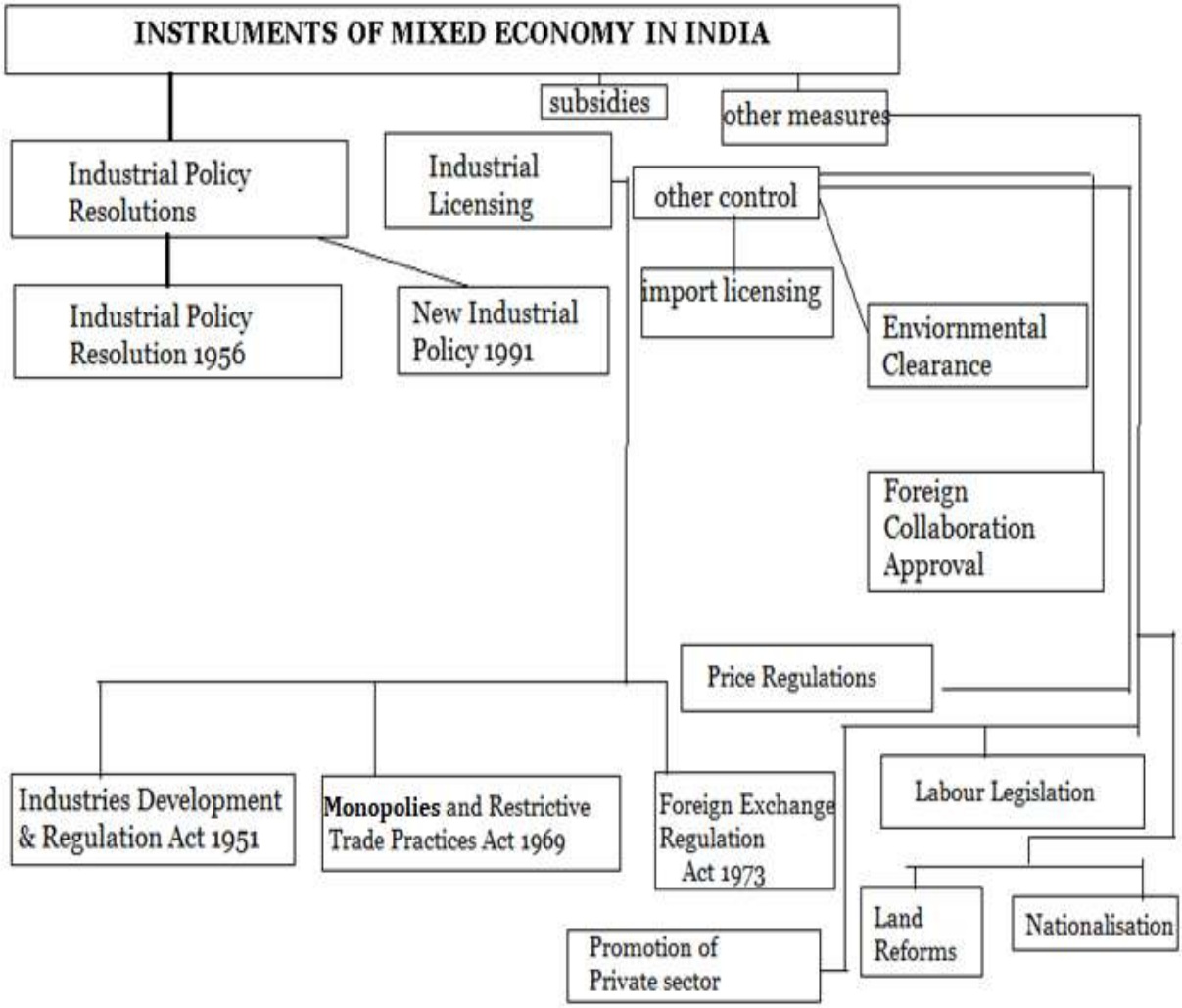
- ❖ Human Development Index (HDI) constructed by United Nations Development Programme (UNDP) has become an important indicator of development.

- ❖ HDI is a composite index of three important parameters of development in education, health and income.
- ❖ Every year, in Human Development Report (HDR) value of HDI is calculated for each country and then they are ranked and classified in to three categories high, medium and low human development countries.
- ❖ According to the UNDP Global Human Development Index (HDI) 2018, India is ranked 130th among 189 countries.

Lowest forest cover state in India Haryana

9. Balance of Payments (BoP)

- ❖ BoP is the systematic record of all economic transactions like trade of goods, trade of services, unilateral transfers, foreign investment, etc. between a country and rest of the world. BoP of a country is also an indicator of development or underdevelopment of the country.
- ❖ BoP of UDCs like India shows that these countries export primary (agricultural) products and raw material and import final products and technologies from developed countries.
- ❖ They invite foreign capital to fill their investment deficiency.
- ❖ India's BoP is generally unfavourable i.e., it faces deficit. To fill this deficit it has to borrow from other countries and international organisations like IMF, World Bank, ADB, etc. In lieu of loans, these organisations interfere in important policy matters and impose their terms and conditions.



AREA	
Total area of the country	3287263 sq.km
Percentage of world area	2.42 per cent (7th Place)
Forest & tree cover area	782871 sp.km (23.81% of the total area)
Total forest cover area (including 4662 km² area under geographical area)	692027 sq.km. (21.05% of the total mangroves)
Agricultural land / cultivable land / Arable land (2011-12)	191.98 million hectares
Cultivated Land (2013-14)	142.60 million hectares
New sown area (2011-12)	140.80 million hectares
Cropping Intensity (2013-14)	135.1%

Net irrigated area	91.53% million hectares
Gross irrigated area	91.53 million hectares (46.9% of Gross Sown Area)
Rainfed are as of the net sown area	53.1%
Largest state (area wise)	Rajasthan
Smallest state (area wise)	Goa
State touching boundaries of maximum states	Uttar Pradesh (Touches boundaries of 8 States-Uttarakhand, Himachal Pradesh, Haryana, Rajasthan, M.P., Chattisgarh, Jharkhand and Bihar)
Area under food grains	125 million hectares (88.7 of per sown area)
Per Capita Land Availability (2011-12)	0.151 hectare

M.P. (Madhya Pradesh) – 1st state to shift financial year from Jan to Dec.

FIVE YEAR PLAN MODELS AN ASSESSMENT

I. IMPORTANT FEATURES OF THE VARIOUS FIVE-YEAR PLANS

Ist Five – Year Plan:

- The first plan was launched on April 1, 1951
- Duration : April 1, 1951 to 31st March 1956
- It is based on the Harrod Domar Model
- Agriculture was the main priority
- National income was 3.6% (it was targeted at 2.1%)
- The per capita income growth rate was 1.8%
- Dams like Bhakra, Hirakud, Mettur Dam and Damodar Valley are initiated during this time.

IInd Five Year Plan:

- Duration (April 1, 1956 to 31st March 1961)
- It was based on Mahalonobis model
- Objective : Initiate and accelerate the process of industrialization
- This plan was based on socialistic pattern of society Increase the National Income by 4.27% per annum Capital output ratio was 2:1
- Iron and steel Plants at Bhilai, Durgapur and Rourkela were established during this time.
- Research Institute like Tata Institute of Fundamental Research and Atomic Energy commission of India was established.

IIIrd Five Year Plan:

- Duration : April 1, 1961 to 31st March 1966.
- Aim : Push the economy up to the take off stage of development
- Objective: Securing a marked advancement towards self-sustaining growth.
- National income was only at 2.5% and it was targeted at 5.0% per annum.
- Per capita income was only 0.2% per annum.
- Third plan was a failure.
- Plan Holiday

- As there was no regular planning for the period between 1966 to 1969, this period is termed as 'Plan Holiday' in 1966 drought after.

Green Revolution

- It refers to period of time when agriculture in India changed to an industrial system due to the adoption of modern methods and technology such as Hw seeds, Tractors etc.

IVth Five Year Plan:

- Duration : 1st April, 1969 to 31st March 1974.
- Aim : Growth with stability and progress towards self – reliance.
- To ensure the growth rate of 5.7% per annum for economic development of the country.
- The annual growth rate in industrial production was only 4.0% per annum, which was below the target.

Vth Five Year Plan:

- Duration : April 1, 1974 to 31st March, 1978.
- Aim : Poverty alleviation and self reliance
- Slogan! Garibi Hatao
- This plan closed one year prior to its schedule date.
- This plan followed the path of export promotion and import substitution.
- Minimum needs programme.
- Target was to achieve general growth of 5.0% per annum in national income.
- Janata Government ended the 5th Plan and introduced a new plan called Rolling Plan between 1978-1980. Rolling Plan is a variant of short term plan.

VIth Five Year Plan :

- Duration : April 1, 1980 to 31st march, 1985.
- In 1980 the 6th plan prepared by Janata Government was abandoned by the Congress Government. A new plan was started.
- Aim : Poverty and unemployment reduction.
- Objective: Qualitative improvement in the living standards of people by means of minimum need programme.

- The targeted growth rate was 5.2% per annum.
- The actual attained growth rate was 5.3% per annum.

VIIth Five Year Plan:

- Duration : April 1st, 1985 to 31st March, 1990.
- Aim : Growth, modernization, self-reliance and social justice.
- Increased employment opportunity
- Targeted growth rate was 5.0% per annum
- Actual growth rate of the N.I. was 5.9%
- The growth rate of per capita income was 3.7%.
- Annual plan (1990-91, 1991-92) New Industrial Policy – 1991 initiated.

VIIIth Five Year Plan:

- Duration : April 1, 1992 to 31st march, 1997.
- Aim : Human Development in various aspects.
- Target : Full employment by the end of this century.
- The annual growth rate in 8th plan was targeted to be 5.6% however, the annual growth rate of NNP at factor cost was estimated at 6.7%.

IXth Five Year Plan:

- Duration : April 1, 1997 to 31st March 2002.
- Aim : Growth with equity and distributive social justice.
- To create employment and ensure food security
- Basic Minimum Service
- To control population growth
- The annual growth rate of total GDP at factor cost was 5.5%.

Xth Five Year Plan:

- Duration : April 1, 2002 to 31st March 2007.
- Reduction of poverty ratio to 20%
- Universal access to primary education
- Compulsory e**l**ementary education (SSA 2002).
- Reduction in the decadal rate of population growth between 2001 and 2011 to 16.2%
- Increase in the literacy rate to 72% by 2007
- Reduction of IMR to 45
- Reduction of MMR to 2 per 1000 live births
- Increase in the forest and trees cover to 25%
- Cleaning all major polluted rivers

- Domestic saving rate : 26.84% (of GDP)
- Current Account Deficit : 1.57% (of GDP)
- Investment Rate : 28.141% (of GDP)
- Incremental Capital Output Ratio (ICOR) actual 4.3
- GDP Growth Rate : 7.6%

XIth Five Year Plan (Described as National Educational Plan)

- Planning Commission on October 19, 2006 approved the Approach Paper of the 11th Plan (2007-2012), which proposes a target of 9% yearly growth rate during the plan and also set a 10% economic growth by the end of the plan (i.e. by 2012).
- Agriculture occupies a special treatment in the XI Plan approach paper.
- It aims to achieve 4% growth from the X Plan growth of less than 2%. XI plan is described as 'A National Education Plan'.

Targets for XIth Plan

1. GDP growth rate to be increased to 10 percent by the end of the plan.
2. Farm sector growth to be increased to 4 percent from 2.13% in X plan.
3. Create 7 crore new jobs.
4. Reduce educated unemployment rate to below 5%.
5. Reduce dropout rate of school children to 20% from 52% now
6. Literacy rate to be increased to 80%.
7. Infant mortality rate to be reduced to 28 per 1,000 births.
8. Maternal mortality rate to be cut to 1 per 1,000 births.
9. Clean drinking water to all by 2009.
10. Improve sex ratio to 935 by 2011-12 and 950 by 2016-17.
11. Electricity connection to all by 2009.
12. A telephone in every village by November 2007.
13. Broadband connectivity to all villages by 2011-12.
14. Roads to all villages with 1,000 population by 2009.
15. Increase forest cover and tree cover by 5 percent.
16. Achieve WHO standard air quality in major cites by 2011-12.

17. Treat all urban wastewater by 2011-12 to clear rivers.
18. Double per capital income by 2016-17.
19. Saving rate 34.8%
20. Investment rate 36.7%

XII th Year Plan (2012-2017)

- The Twelfth Plan is titled "Faster, more inclusive and sustainable growth". The plan came into operation after being approved by the NDC on December 27, 2012.

Targets under Twelfth Plan

Economic Growth

- Real GDP Growth Rate of 8.2%
- Agriculture Growth Rate of 4.0%
- Manufacturing Growth Rate of 10.0%
- Every state must have a higher average growth rate in the Twelfth Plan than that achieved in the Eleventh Plan.

Poverty and employment

- Head-count ratio of consumption poverty to be reduced by 10 percentage points over the preceding estimates by the end of Twelfth Five Year Plan.
- Generate 50 million new work opportunities in the non-farm sector and provide skill certification to equivalent numbers during the Twelfth Five Year Plan.

Education

- Mean years of schooling to increase to seven years by the end of Twelfth Five Year Plan.
- Enhance access to higher education by creating two million additional seats in higher level institutions.
- Eliminate gender and social gap in school enrolment (that is, between girls and boys and between SCs, STs, Muslims and the rest of the population) by the end of Twelfth Five Year Plan.

Health

- Reduce IMR to 25 and MMR to 1 per 1000 live births and improve Child Sex Ratio (0-6 years), to 950 by the end of the Twelfth Five Year Plan.
- Reduce Total Fertility Rate to 2.1 by the end of Twelfth Five Year Plan.
- Reduce under-nutrition among children aged 0-3 years to half of the National Family Health Survey-3 levels by the end of Twelfth Five Year Plan.

Infrastructure, including Rural Infrastructure

- Increase investment in infrastructure as a percentage of GDP to 9% by the end of Twelfth Five Year Plan.
- Increase the Gross Irrigated Area from 90 million hectare to 103 million hectare by the end of Twelfth Five Year Plan.
- Provide electricity to all villages by the end of Twelfth Five Year Plan.
- Connect all villages with all-weather roads by the end of Twelfth Five Year Plan.
- Upgrade national and state highways to the minimum two-lane standard by the end of Twelfth Five Year Plan.
- Complete Eastern and Western Dedicated Freight Corridors by the end of Twelfth Five Year Plan.
- Increase rural tele-density to 70% by the end of Twelfth Five Year Plan.
- Ensure 50% of rural population has access to 55 Litres Per Capita per Day piped drinking water supply and 50% of Gram Panchayats, achieve the Nirmal Gram Status by the end of Twelfth Five Year Plan.

Environment and Sustainability

- Increase green cover (as measured by satellite imagery) by 1 million hectare every year during the Twelfth Five Year Plan.
- Add 30000 MW of renewable energy capacity in the Twelfth Plan.
- Reduce emission intensity of GDP in line with the target of 20% to 25% reduction by 2020 over 2005 levels.

Service Delivery

- Provide access to banking services to 90% Indian households by the end of Twelfth Five Year Plan.
- Major subsidies and Welfare related beneficiary payments to be shifted to a direct cash transfer by the end of the Twelfth Five Year Plan, using the Aadhar Platform with linked bank accounts.

Sixth Five year plan (1980-85) marked the beginning of economic liberalisation.

FIVE YEAR PLANS AND GROWTH PERFORMANCE

Five Year Plan	*Period*	*Target growth rate of GDP (In % age)*	*Achievement (In % age)*	*Model*
First Plan	1951-56	2.1	3.6	Harrod-Domar Model
Second Plan	1956-61	4.5	4.21	Prof. P.C. Mahalanobis
Third Plan	1961-66	5.6	2.72	Sukhmoy Chakraborty and Prof. Saddy
Fourth Plan	1969-74	5.7	2.05	Ashok Rudra and Alon S. Manney
Fifth Plan	1974-79	4.4	4.83	A like fourth Five – Year Plan, which is called Investment Model of Planning Commission, D.D.Dhar.
Sixth Plan	1980-85	5.2	5.54	Based on investment Yojana Infrastructural changing and trend to growth model
Seventh Plan	1985-90	5.0	6.02	A Like Six Five-Year plan prepared by Pranav Mukherjee
Eighth Plan	1992-97	5.6	6.68	John W. Miller Model
Ninth Plan	1997-02	6.5	5.5	Created by 'Planning Commission'
Tenth Plan	2002-07	8.0	7.7	-do-
Eleventh Plan	2007-12	9.0	8	Prepared by Prof. C. Rangarajan
Twelfth Plan	2012-17	8%	---	Prepared by Planning Commission

- *Sindhusree Kullar is the first CEO of NITI Aayog.*

Drawbacks of Planning Commission

- ✓ 1st Plan was successful
- ✓ 2nd Plan was successful
- ✓ 3rd Plan was failure
- ✓ 4th Plan was failure
- ✓ 5th Plan was successful
- ✓ 6th, 7th, 8th Plan was successful
- ✓ 9th, 10th, 11th Plan was successful
- ✓ So we had drawbacks on 3rd, 4th, 9th, 10th and 11th plans only

II. INDIA VISION – 2020

- ❖ Planning Commission had released **India Vision – 2020 on January 23, 2003.**
- ❖ Which represents pre-assessment of the progress of Indian Economy for the next two decades. Mr. Shyam Prasad Gupta, a member of planning commission, prepared this document.

The Salient points of the document are :

- ❖ The expected annual growth rate by 2020 to be 9%
- ❖ Elimination of unemployment, illiteracy and poverty by 2020
- ❖ 1.35 billion Population of the country to have better living standard by 2020.
- ❖ Per capital income to get doubled by 2020.
- ❖ Environment situation to remain as unbalanced as present.
- ❖ With 2% annual employment generation rate, 20 Crore new employment opportunities to be created by 2020.
- ❖ Employment share in agriculture to come down from present 56 to 40 % by 2020.
- ❖ Unorganized sector to create more additional employment opportunities.
- ❖ Urban population percentage to get increased from existing 25% to 40%

LAND REFORMS AND AGRICULTURE

Agriculture:

- Agriculture is the backbone of our economic system.
- Agriculture has been the major source of livelihood in the Indian economy. (nearly 55 -60 % of the people engaged in this sector)
- India is primarily an agricultural country.
- Agriculture is not only the biggest sector of the Indian economy but also the most free private sector, too.
- It is the only profession which still carries no burden of individual income tax.
- This is the biggest unorganised sector of the economy accounting for more than 90 per cent share in the total unorganised labour-force (93 per cent of the total labour force of the economy i.e. 39.7 crores, is employed in the unorganised sector).

Importance of National Income:

- Agriculture contributes even now a major share of the national income in India.
- The main source of livelihood is agriculture.

Provider of Employment

- I provider direct and Indirect Employment
- Agriculture provides raw materials to the industries.
- Indian agriculture plays an important vital role in the country's international trade.
- Capital Formation and Investment The major part of production assets of the country is in the form of agricultural assets like land, irrigation facilities, tractors, agriculture implements, ploughs, pump sets and storages.
- In India, agriculture meets almost the entire food requirements of the people.

- Agriculture is the backbone of the Indian economy and prosperity of agriculture can also largely stand for the prosperity of the Indian economy.
- International Ranking At the global level, Indian agriculture has ranked in certain commodities

Contribution of Agriculture to Economic Growth:

They are:

- Product contribution i.e., making available food and raw materials.
- Market contribution i.e., providing the market for producer goods and consumer goods produced in the non-agricultural sector.
- Factor contribution i.e., making available labour and capital to the non-agricultural sector and Foreign Exchange contribution

Land Reforms :

- Land reforms refer to all kinds of policy-induced changes relating to the ownership, tenancy and management of land.

Objectives of land reforms in India :

- In India the land reform programme has been one of the major policies for rural development.
- The major objectives of land reforms are as follows:
- Restructuring of agrarian relation to achieve egalitarian social structure.

Total agricultural land in the world -7.5%

- Elimination of exploitation in land relations
- Actualization of the goal of 'land to the tiller'
- Improvement of socio-economic conditions of the rural poor by widening their land base.
- Increasing agricultural production and productivity
- Facilitating land based development of rural poor
- Infusion of a greater measure of equality in local institutions.
- To realise the objectives of the land reforms, the government took three main steps which had many internal sub-steps:

I. Abolition of Intermediaries :

- Under this step, the age-old exploitative land tenure systems

of the Zamindari, Mahalwari and Ryotwari were fully abolished.

II. Tenancy Reforms :

- Under this broader step, three inter-related reforms protecting the land tenants were effected.
- Regulation of rent so that a fixed and rational rate of rent could be paid by the share-croppers to the land owners
- Security of tenure so that a share-cropper could be feel secure about his future income and his economic security and ownership rights to tenants so that the landless masses (i.e. the tenants, the share-croppers) could be transferred the final rights for the land they plough - "land to the tillers".

III. Land ceiling

- Consolidation land holding and cooperative farming

Cropping Pattern in India:

- Cropping pattern means the proportion of area under different crops at a point of time.
- In other words, it means a ratio of different crops cultivated at a particular time.
- A change in cropping pattern implies a change in the proportion of area under different crops.

Important Crops:

- Total agricultural land – out of 100% - food crops -74% , cash crops -26%.
- Food crops - rice , wheat , maize, bajra
- Beverage crops - coffee , tea
- Fiber crops - jute, cotton
- Oil seeds - groundnuts, sunflower
- Narcotic crops - tobacco
- Plantation crop - tea, coffee, rubber
- Sugar crops - sugarcane, beet root
- Spice crops - mirchi, turmeric, ginger, pepper
- Horticultural crops - all types of fruits

Major Producer of the Crops in India

- Onion - Maharastha, Madhya Pradesh, Karnataka
- Potato - Uttar Pradesh, West Bengal, Bihar.
- Tomato -Bihar, Karnataka, Uttar Pradesh

Top Vegetable Producing States of India

- West Bengal
- Uttar Pradesh
- Bihar

Top Cereal producing States of India

- Uttar Pradesh
- Punjab
- Madhya Pradesh

India agriculture contributes almost 4% of GDP

Top Food grain Production

- Uttar Pradesh
- Punjab
- Madhya Pradesh

Food Crops

- Rice - World wide china tops - next India, In India - West Bengal, AP , UP , Punjab.
- Wheat - Top -3 China, India, USA, In India - UP , Punjab, Harayana.
- Jowar - Top - USA , China , In India - Maharastra, Karanatka, MP.
- Maize - Top - USA, Mexico, India, in India - AP (Andhra), Karnataka
- Bajra - In India -- Rajasthan, Maharastra, Gujarat.
- Ragi - Top - Karanataka, Tamilnadu, Andhraprade.sh
- Barley - Top - UP, Rajasthan.
- Pulses - MP, UP.
- Ground nut /Oil seeds -- AP, Gujarat, Tamilnadu.

Spice crops :

- Pepper -- Indonesia, India, In India -Kerala
- Cardamom -- India, Indonesia, In India -Kerala
- Cloves - Tanzania, In India – Kerala
- Turmeric -- India top in the world , In india - Guntur
- Saffron -- India 1st place, In India - Jammu & Kashmir
- Ginger -- India top in the world, In India - Kerala
- Mustard - Rajasthan.

Plantation Crops :

- Tea - Top 3 - India, China,Srilanka In India - Assam, west Bengal, Tamilnadu
- Coffee - top-3 . Santoos , Colombia Ecuador , India - 5th, In India - Karnataka

India's Ranking in Food Production

- *India is the largest producer of milk, pulses, livestock, jute, jute like fibres, tea and cauliflower.*
- *India is the second largest producer of wheat, rice, fruit, sugar cane, groundnut and tobacco.*
- *India ranks second worldwide in farm output.*
- *India is also the world's second or third largest producer of several dry fruits, agriculture-based textile raw materials, roots and tuber crops, pulses, farmed fish, eggs, coconut, sugar cane and numerous vegetables.*
- *India ranked within the world's five largest producers of over 80% of agricultural produce items, including many cash crops such as coffee and cotton.*
- *India is also one of the world's five largest producers of livestock and poultry meat.*

- Rubber - TOP -3 -- Thailand , Indonesia, India, In India - Kerala, Tamilnadu, Karnataka
- Coconut – Top -3 , Indonesia , Philliphines, India - In India -- Kerala, Tamilnadu, Karnataka

Cash crops:

- Cashewnut- Maharashtra, Andhra Pradesh, Odisha.
- Jute - West Bengal Bihar Assam
- Cotton –Gujarat, Maharashtra Andhra Pradesh.

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) -Hyderabad

Cropping Seasons in India :

- **Kharif** Crops of India Sown in summers between May and July, and harvested after the rains, in September and October. Eg: Rice, Jowar, Bajra, Maize, Cotton, Jute, Sugarcane, Tobacco, Groundnut, Pulses, etc.
- **Rabi** Crops of India Sown at the beginning of winter and harvested before the onset of the summer season, between Feb and April. Eg: Wheat, barley, oilseeds, gram, potatoes, etc.
- **Zaid** Crops They are raised between April and June. Eg :Melon, watermelon, cucumber, toris, leafy and other vegetables.

Agriculture Holdings

Holding	*Feature*
Economic Holding	It is that holding which censures a minimum satisfactory standard of living to a family.
Family Holding	Gives one plough under traditional farming system.
Optimum Holding	Maximum size of the holding which must be possessed and owned by a family is called optimum holding.
Marginal Holding	Land area less than one hectare.
Small Holding	Land area between 1 and 4 hectares.
Medium Holding	Land area between 4 and 10 hectares.
Large Holding	Land area more than 10 hectares.

Reorganisation of Agriculture

- This step again has many inter-related and highly logical provisions in the direction of rational agrarian reforms.
- Redistribution of land among the landless poor masses after promulgating timely ceiling laws—the move failed badly with few exceptions such as West Bengal, Kerala and partially in Andhra Pradesh.
- Consolidation of land could only succeed in the regions of the Green Revolution (i.e., Haryana, Punjab and Western Uttar Pradesh) and remained marred with many loopholes and corruption.
- Cooperative farming which has a high socioeconomic moral base was only used by the big farmers to save their lands from the draconian ceiling laws.

Land reform measures in India :

- The land reforms programme in India has been done through three different methods:
  - Voluntary adoption facilitated by incentives provided by the State through measures like co-operative farming and consolidation of holdings.
  - Voluntary adoption supplemented by statutory compulsion made possible by the enactment of legislation as in the case of consolidation of holdings.
  - Compulsion exercised through different legislative measures, as with the abolition of intermediaries, tenancy reforms, ceilings on holdings etc.

PDS :

- PDS was envisaged in 1967 to act as a price support programme for the consumer during the periods of food shortage of the 1960's
- The basic aim was to provide essential commodities like rice, wheat, sugar, edible oil & kerosene at subsidised rate to the people to eliminate poor.
- The target public distribution system (TPDS) was introduced with effect from June 1997 in order to make the TPDS more focussed and targeted towards scheme contemplates identification of 10 million poor families and providing then with 35 kg of food grams at Rs. 2 /kg for wheat and Rs 3 / kg for rice under PDS.

Main Constituents of Public Distribution System :

- Fair Price Shops or Ration Shops
- Consumers Co-operative Stores
- Shops selling Cloth at Controlled Prices
- Super Bazaars
- Kerosene Retailers
- Commodities of Distribution

Minimum support prices (MSP) :

- It is a minimum price at which the government will purchase farmers' crops—whatever may be the market price for the crops.
- The Government of India started announcing the MSP in 1967 -68 for wheat which was expanded to cover many more crops later.
- It is declared by government, normally at the beginning of sowing season for every important agricultural commodity.
- If the prices fall below minimum support prices, government will buy the entire marketable surplus at procurement prices.

Procurement prices :

- These are the prices which are declared by government, generally at the time of harvest of crops.
- These prices are announced by government on the recommendations of Commission for Agricultural Costs and Prices (CACP), constituted on 1985.

- These prices are widely used by government for the procurement of wheat and rice.
- Procurement prices are generally higher than minimum support prices.

Issue Price

- These are the prices at which food grains are allocated and supplied by Food Corporation of India (FCI) to the states and union territories.
- These prices meet the requirements of public distribution system.
- Prices of goods to be supplied through fair price shops directly depend upon issue prices.
- Issue prices are normally less than market prices and higher than procurement prices.

Retail prices :

- Public distribution system is carried on through the network of fair price shops (ration shops).
- These shops supply essential consumer goods to households at the prices fixed by government. These prices are known as retail prices.
- Retail prices are higher than issue prices so that the expenses of public distribution system may be recovered and the licensees may get a certain margin.

Buffer stock operations:

- Buffer stock operations refer to buying and selling of food stocks by government.
- These operations serve two important purposes:
- To regulate and control price fluctuations within a reasonable limit.
- To enable government to procure food stocks so that regular supply of these stocks may be ensured throughout the year as well as throughout the country.
- These operations are carried on by Food Corporation of India (FCI).

National food security bill :

- The National Food Security Bill was introduced in the Lok Sabha on 22 December, 2011. As per the provisions of the Bill, it:

- It is proposed to provide 7 kg. of food grains per person per month belonging to priority households at prices not exceeding Rs. 3 per kg of rice, Rs. 2 per kg of wheat, and Rs. 1 per kg of coarse grains and to general households not less than 3 kg of food grains per person per month at prices not exceeding 50 per cent of the MSP for wheat and coarse grains and derived MSP for rice.

Agricultural Price Policy:

- ❖ Agricultural price policy means a policy to determine, regulate and control the prices of agricultural products.

India agricultural population - 64%

E-Choupal :

- ❖ It is an initiative of ITC LIMITED a conglomerate in India, to link directly with rural farmers via the Internet for agricultural marketing and procurement of agricultural and aquaculture products.

TRIFED:

- ❖ The Government established TRIFED (Tribal Co-operative Marketing Development Federation of India Ltd.) in August 1987 and started functioning in April 1988.
- ❖ The basic aim of TRIFED was to save tribals from exploitation by private traders and to offer them remunerative prices for their minor forest produce and surplus agriculture products.

NAFED :

- ❖ NAFED (National Agricultural Co-operative Marketing Federation of India Ltd.) has been established on 2nd October 1958 in co-operative sector at national level for marketing of agriculture products.

Agricultural credit :

- ❖ Three types of loans are provided to Indian farmers to meet their financial requirements—
  - Short term loans
  - Medium term loans
  - Long term loans

Short Term Loans:

- ❖ Short term loans are provided for a period of less than 15 months to meet out expenses of routine farming and domestic consumptions.
- ❖ This type of loan is demanded by farmers for purchasing seeds, fertilizers and for meeting out family requirements.

Medium Term Loans:

- ❖ Medium term loans are provided for a period of 15 months to 5 years to purchase agricultural equipments, animals and for land improvements.

Long Term Loans:

- ❖ Long term loans are provided for a period of more than 5 years.
- ❖ This type of loan is taken by the farmers to purchase land and expensive agricultural equipment and for repayment of old loans.

Irrigation :

- ❖ The Planning Commission classifies irrigation projects/schemes in India on the following lines :
  - Major Irrigation Schemes—those with cultivable command areas (CCA) more than 10,000 hectares.
  - Medium Irrigation Schemes—those with cultivable command areas (CCA) between 2,000 and 10,000 hectares.
  - Minor Irrigation Schemes—those with cultivable command area (CCA) up to 2,000 hectares.

Agricultural Productivity :

- ❖ Agricultural productivity is the ratio of agricultural inputs and output.
- ❖ It indicates the efficiency with which the inputs have been utilized.
- ❖ It indicates how much production has been obtained from a given amount of inputs.
- ❖ It can be measured as:
  - ✓ Agricultural Productivity = Total Production / Amount of Inputs Employed.
  - ✓ Productivity of Land = Total Production / Area of Land.
  - ✓ Productivity of Labour = Total Production / No of Workers Employed.

- ✓ Productivity of Capital = Total Production/ Total Capital Employed.

Green Revolution

- ❖ Revolution was a part of new agricultural strategy, to increase the food production to eliminate poverty, which included initially, the intensive agriculture district programme (IADD) and later the high yielding varieties programme (HYVP)
- ❖ It was launched in the half of 1960's it was the branch of Norman Borlaug, in India it was made successful by Dr. M. S. Swaminathan.
- ❖ The achievement by green revolution were rise in cereal production especially wheat and rice, change in cropping pattern in favour of wheat and increase in employment opportunities.

National food security Act 2013 – Tamil Nadu & Kerala are last to join in their act.

Second Green Revolution :

- ❖ The call was given by than PM. Mr. ManMohan Singh at the 93rd science conference in 2006.
- ❖ The second green revolution seeks to build up on the achievements of first green revolution and bridge the regional and crop in balance which were not addressed by first green revolution.
- ❖ The second green revolution seeks to cover dry land farming and concentrate on the small and marginal farmers.
- ❖ It seeks to raise the food grain production to 400 million tonnes by 2020.

Evergreen Revolution :

- ❖ Concept given by renowned agricultural scientist Dr. M.S.Swaminathan.
- ❖ It emphasis on Organic agriculture and green agriculture with the help of integrated nutrient supply and integrated national resources management.
- ❖ The cause of the evergreen resolution is sustainability.

- ✓ First time statred in - 1966-67
- ✓ First adopted Ludiana (Punjab) , West Godavari (A.P), Tanjavur (TAMIL NADU)
- ✓ Used crops in green revoultion - Wheat , Rice, Jowar , Maize
- ✓ Green revolution - Phase-2 - 1983
- ✓ Father of Green Revolution - "Norman borlang" - USA
- ✓ Father of Indian Green Revolution - "M.S.Swaminathan"- India
- ✓ Green Revolution "word" Coined by -" William Goud" – UK
- ✓ "Ever Green Revolution " started in the year -2010

Yellow Revolution

- ❖ Oil seeds production.
- ❖ Oil Seeds, Edible Oil , Especially Mustard.
- ❖ Father of Yellow Revolution " Sam Pitroda ".
- ❖ India occupied first place in groundnuts.

White Revolution

- ❖ Milk & milk products.
- ❖ Father of white revolution - "Varghese Kurien ".
- ❖ India occupies world wide - 1st place - Butter, Ghee, Cheese.

Blue Revolution

- ❖ Fishes and Marine Products.
- ❖ Fish production blue revolution started -- 1960.
- ❖ Father of Blue Revolution- "Dr.Arun Krishnan".
- ❖ Fish & sea foods production World wide --- China 1st place
- ❖ India -- 2nd place
- ❖ In India- 1st place -- west Bengal, 2nd Gujarat , 3rd -Kerala
- ❖ Fresh water fish production - top-2 -- west Bengal, Andhrapradesh.
- ❖ Salt water fish production -- top-2 -- Gujarat , Kerala
- ❖ Fish most usage state - West Bengal

Pink Revolution

- ❖ Prawn, Onions, Pharmaceutical.
- ❖ Father of Pink Revolution - "Durgesh Patel"
- ❖ Father of Induced Breeding - "Prof.Hirlal Chaudri"
- ❖ Leading producer of pharchemicals - Switzerland, Germany,USA
- ❖ India ranks - 6th place

Grey Revolution

- Fertilizers

Brown Revolution

- Cocoa, Leather
- India placed first in leather industries
- India occupies first in - number of cows, sheeps
- Top beef exporting countries TOP --> India - 240 mn tonnes, Brazil , USA

Silver Revolution

- Egg (Poultry)
- Father of Silver Revolution- INDIRA

Violet Revolution

- Woolen products
- Australia - 1st position in wollen production.
- India occupies - 7th position , In India – Punjab

Black Revolution

- Crude oil & non conventional energy

Red Revolution- Meat & Tomatoes

- Father of Red Revolution-Vishal

Round Revolution - Potato

- Russia occupies first place in potatoes.

Agriculture research centres in India :

1. Indian Agricultural Research Institute (IARI)--New Delhi.
2. Central Rice Research Institute - Cuttack.
3. Central Sugarcane Research Institute -Coimbatore.
4. National Sugar Research Institute - Kanpur.
5. Central Tobacco Research Institute - Rajahmundry.
6. Central Potato Research Institute - Kufri, Shimla.
7. Central Island Agriculture Research Institute - Port Blair.
8. Central Institute of Cotton Research - Nagpur.
9. Central Institute of Agricultural Engineering - Bhopal.
10. Central Institute of Fisheries Education - Mumbai.
11. Central Institute of Fishery Technology - Cochin.
12. Central Institute of Fresh Water Agriculture - Bhubaneswar.
13. Central Inland Fisheries Research Institute - Barrackpore.
14. National Institute of Agricultural Marketing - Jaipur.
15. National Institute of Animal Health - Baghpat (U.P)
16. Indian Council of Agricultural Research (ICAR) - New Delhi.

17. Disease Investigation Laboratory - Pune.
18. Central Soil Salinity Research Institute - Karnal (Haryana).
19. Indian Instuite of Horticulture - Bangalore.
20. Wheat Research Institute - Karnal.

Agricultural Insurance Schemes:

- National Agricultural Insurance Scheme (NAIS): 1999-2000
- Comprehensive Crop Insurance Scheme-CCIS of 1985
- Pilot Weather Based Crop Insurance Scheme (WBCIS): 2007
- Krishi Shramik Suraksha Yojana: 2001
- Farm Income Insurance Scheme: 2004
- Varsha Bima (Rainfall Insurance Scheme): 2004
- Pradhan Mantri Fasal Bima Yojana, a new crop insurance scheme : 2016

Agriculture Production Board

SL.NO	Board	Headquarter	Act
1.	Coffee Board	Bengaluru (Karnataka)	Coffee Act, 1942
2.	Rubber Board	Kottayam (Kerala)	Rubber Act (Kerala), 1947
3.	Tea Board	Kolkata (West Bengal)	Tea Act, 1953
4.	Tobacco Board	Guntur (Andhra Pradesh)	Tobacco Act (A.P), 1975
5.	The Spices Board	Kochi (Kerala)	Spices Act, 1986
6.	National Meat and Poultry Procession Board	Delhi	26 Dec, 2008
7.	Indian Grape Procession Board	Pune (Maharashtra)	2nd Jan, 2009

Agricultural Insurance Schemes:

- National Agricultural Insurance Scheme (NAIS): 1999-2000
- Comprehensive Crop Insurance Scheme-CCIS of 1985
- Pilot Weather Based Crop Insurance Scheme (WBCIS): 2007
- Krishi Shramik Suraksha Yojana: 2001
- Farm Income Insurance Scheme: 2004

- ❖ Varsha Bima (Rainfall Insurance Scheme): 2004
- ❖ Pradhan Mantri Fasal Bima Yojana, a new crop insurance scheme : 2016

Agriculture Related Schemes :

Intensive Agriculture Development Programme (IADP) - 1960-61 :

- ❖ The Objective was to provide loan for seeds and fertilizers to farmers.
- ❖ It was started with the assistance of Ford Foundation.
- ❖ Also called "Package Program".

Intensive Agriculture Area programme (IAAP) :(1964-65)

- ❖ Emphasis should be given to the development of scientific and progressive agriculture in an intensive manner in the areas which have High production potentials.
- ❖ The idea was to cover at least 20% of the cultivated area of the country.

High Yielding Variety seeds Programmes : (1966-67)

- ❖ It was launched in the Kharif of 1966-67 with an objective to attain self-sufficiency in food by 1970-71.
- ❖ It envisaged the introduction of
  - High-yielding varieties of seeds
  - Increased use of fertilizers
  - Increased irrigation.
- ❖ These three are collectively as the Green Revolution.

Command Area Development Programmes (1974-75)

- ❖ To bridge narrow the gap between irrigation potential created and actually utilized in major and medium irrigation schemes. It is renamed as Command Area Development and Water Management Programme (CADWMP) since April 1, 2004.
- ❖ It has also been amalgamated with the Accelerated Irrigation Benefit Programme.

Accelerated Irrigation Benefit Programme

- ❖ The Central Government launched the Accelerated Irrigation Benefit Programme (AIBP) from 1996-97 for extending loan assistance to states for the completion of near complete irrigation scheme.

Drought Prone Areas Programme (DPAP) – 1973 - 74 :

- To tackle the special problems faced by those fragile areas which are constantly affected by severe drought conditions.
- Financial assistance 50:50 (Centre and State).

Desert Development Programmer (DDP) : 1977- 78

- To mitigate the adverse effects of desertification.
- Funding - 100% Central Government.

Integrated Wasteland Development Programme (IWDP)

- DPAP, DDP and IWDP have been consolidated as a comprehensive programme named 'Integrated Watershed Management Programme (IWMP).
- Integrated Watershed Management Programme :
- The main objectives of the IWMP are to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water.
- Integrated Watershed Development Programme (IWDP) - 1989 :
- It was launched under the aegis of National Wasteland Development Board for development of wastelands on watershed basis.

INDUSTRIAL GROWTH

- Industry refers to an economic activity concerned with the processing of raw materials and manufacture of goods in factories.

Important of industry:

- ✓ Rapid growth of national income.
- ✓ Industries can provide better quality of more employment than agriculture.
- ✓ Value addition is possible in industrial sector.
- ✓ More foreign exchange generation
- ✓ Provides goods for the development of basic infrastructure of the country like power telecom etc.

- In India, different industries generate employment opportunities to nearly 20% of the population, while their share in the GDP is 28%.

TYPES OF INDUSTRIES

- Basic Goods Industries (include minerals, fertilizers, cement, iron and steel, electricity etc.)
- Capital Goods Industries include machinery, machine tools, rail-road equipment's etc.)
- Intermediate Goods Industries (include chemicals, rubber, plastic, coal and petroleum products)
- Consumer Goods (include consumer durables and non-durables like man-made fibres, beverages, mobile phones, cosmetics, toiletries, etc.)

CORE INDUSTRIES IN INDIA

- These are the industries that are necessary for industrialisation of a country. The Eight Core Industries comprise nearly 38% of the weight of items include in the Index of Industrial Production (IIP).

- Electricity Generation (weight : 10.32%)
- Steel production (weight : 6.68%)
- Petroleum Refinery Production (weight: 5.94%)
- Crude Oil Production (weight: 5.22%)
- Coal Production (weight: 4.38%)
- Cement production (weight: 2.41%)
- Natural Gas production (weight: 1.71%)
- Fertilizer production (weight: 1.25%)

State-wise Distribution of Industries

- There is a great regional imbalance in location of various industries in the country. The country can be divided into three regions.

1. Industrially advanced states, Maharashtra, Gujarat, Tamil Nadu and West Bengal..
2. Middle – level industrial states; Andhra Pradesh, Karnataka, Uttar Pradesh, and Punjab.
3. Industrially backward states; Rajasthan, Kerala, Haryana, Orissa, Himachal Pradesh.

Industrial Policies

- Industrial Policies were launched in 1948, 1956, 1977, 1980 and 1991.
- The Industrial Policy Resolution of 1948 marked the beginning of the evolution of the Indian Industrial Policy.
- The IPR 1956 called the Economic Constitution of India, gave the public sector a strategic role in the economy.
- The objective of the IPR 1956 was establishment of socialistic pattern of the society in the country.

Industrial Policy Resolution 1948

- It was announced by Minister of industries and commerce shyama prasad mulherge.

Salient Features of IPR 1948

- Development of mixed economy
- State programme for the development of industries.
- Promotion of small and cottage industries.
- Foreign intestine was allowed, but effective control should be with industries.

IPR 1956

- Described as economic constitution of India.
- Its main objectives were to accelerate the rate of economic growth and to speed up industry nation for achieving a socialistic pattern of society.

Salient features :

- Schedule A (Public sector) seventeen industries were exclusively reserved for the public sector.
- Schedule B (Mixed sector) twelve industries were placed the mixed sector of public and private sector. These were to be proselyte state owned and in which state would generally set up new units.
- Schedule C (private sector) all the remaining industries and their future development world in general be left to the inactive and enterpriser of the private sector.

IPR 1977:

- The thrust of the policy was on decentranational of the industries and the promotion of small scale and cottage industries.
- It introduce the concept of tiny sector within the small scale sector

IPR 1980

- The policy emphasised the optimum utilisation of installed capacity technological up gradation and moderation.

Monopoly and Restrictive Trade Practices (MRTP) Act 1969

- MRTP Act was enacted in 1969 and MRTP Commission was constituted in 1970 to prevent the concentration of economic power and to prohibit restrictive or unfair trade practices.
- Under the act companies having assets beyond the threshold limit (ie RS. 20 cr in 1985) were placed under the preview of the act.
- Certain restrictions are imposed on such companies like prior approval of the MRTP commission for establishment of new undertakings, expansion of under takings, mergers and acquisition.

Competition Act 2002

- The completion act was enacted by the government in 2002, on the recommendation by S.V.S. Raghavan committee.
- If repealed the MRTP Act and the MRTP commission was placed by the competition commission of India.

Objectives of CCI

- It encourage completion present cubes of dominate (rather than dominance as such) and to ensure of level playing field for all the enterprises in the Indian economy.

Compulsory licensing (5 industry) :

1. Distillation and brewing of alcoholic drinks.
2. Cigars and Cigarettes of tobacco and manufactured tobacco gab statues
3. Electronic, aerospace and defence equipments.
4. Industrial explosive including match boxes.
5. Hazardous chemical : e.g Hydrocyanic acid, Phosgene, isocyanates and disocyanetes of hydrocarbon

Reserved Industry:

1. Atomic energy
2. Railway
3. The substance specified in the specified in the schedule to the notification of the GOI in the Department of Atomic energy dated March 1995

New Industrial Policy, 1991

- Formed the basis for the economic reforms in India, which proved to be a watershed in the history of Indian economy.
- The main aim of the new industrial policy 1991 was to unshackle the Indian industries from the cobweb of unnecessary bureaucratic control to introduce liberalisation with a view to integrate Indian economy with the world economy to remove restriction on FDI and to abolish MRTP Act, 1969 and to shed the load of the public enterprises

Disinvestment Policy

- The Industrial Policy Statement of 24th July, 1991 outlined the disinvestment of selected PSEs.

- Disinvestment is a process, through which privatisation could take place
- The objective of pursuing disinvestment in India were unlocking resources trapped in non-strategic PSEs, reducing public debt and transferring commercial risk to the private sector.
- First Disinvestment Commission was set-up in 1996, under the Chairmanship of Mr EV Ramkrishna, which was later reconstitute in July, 2001, under Dr RH Patil.
- To shed the load of the excess workers in the public sector government mooted with the idea of Voluntary Retirement Scheme (VRS). VRS is also called Golden Hand Shake Scheme.
- For this purpose, it had set-up a National Renewal Fund (NRF) in 1992, which was abolished it in 2000.

Public Sector Enterprises

- As on 31st March, 2011, there were 248 Central Public Sector Enterprises (CPSEs). Out of 248 CPSEs, 220 were in operation and 28 were under construction.
- To measure the performance of management of PSEs at the end of the year in an objective and transparent manner, the concept of Memorandum of Understanding (MoU), on the recommendation of Arjun Sengupta Committee (1988), was started in 1991.

New Company Bill, 2013

- Six Decades Old Company Act, 1956 will replace by this act. In this act, it has been made mandatory for the companies to include provisions for social welfare. Till date, in the 53 years Old Company Act, 1956 has been amended 25 times.
- For companies having an annual turnover above Rs. 10 lakh, it has been made mandatary to appoint one third independent directors and at least appointment of one female director.

MAHARATNA

- In 2009, the government established the Maharatna status, which raised the PSEs investment

ceiling from Rs. 1000 crore to Rs. 5000 crore.

- The Maharatnas firm can now decide on investments of upto 15% of their net worth.

Criteria for Maharatna

The six criteria for eligibility of Maharatna are having Navratna status.

- Listed on Indian stock exchange an average annual turnover of more than Rs. 28000 crore during the last three years.
- An average annual net worth of more than Rs. 10000 crore during the last three years.
- An average annual net profit after tax of more than Rs. 2500 crore during the last 3 years and should have significant global presence.

List of Maharatna

There are seven Maharatnas in India

1. Oil and Natural Gas Corporation (ONGC)
2. Gas Authority of India limited (GAIL)
3. Steel Authority India Limited (SAIL)
4. Indian Oil Corporation (IOC)
5. National Thermal Power Corporation (NTPC)
6. Coal India Limited (CIL)
7. Bharat Heavy Electricals Limited (BHEL)

NAVARATNA

To be qualified as a Navratna Company

- The company must obtain a score of 60 (of the total 100)
- The score is based on six parameters, which included net profit to net worth, total manpower cost to total cost of production, Profit before Depreciation, Interest and Taxes (PBDIT) to capital employed, PBDIT to turnover, Earning per share and inter-sectoral performance.
- The company must first be a Miniratna-I and must have four independent directors on its board. The Navratna status empowers a company to invest upto Rs.1000 crore or 15% of their net worth overseas without government approval.
- At present, there are 17 Navratnas.

List of Navratna

1. Bharat Electronics Limited
2. Bharat Petroleum Corporation Limited
3. Hindustan Aeronautics Limited
4. Hindustan Petroleum Corporation Limited
5. Mahanagar Telephone Nigam Limited
6. National Aluminium Company Limited
7. National Mineral Development Corporation
8. Neyveli Ligmite Corporation Limited
9. Oil India Limited
10. Power Finance Corporation Limited
11. Power Grid Corporation of India Limited
12. Rashtriya Ispat Nigam Limited
13. Rural Electrification Corporation Limited
14. Shipping Corporation of India Limited
15. Engineers India Limited
16. National Building Construction Corporation Limited
17. Container Corporation of India Limited

MINIRATNA

Miniratna Category I

- Public Sector Enterprises (PSEs) that have made profit continuously for the last three years or earned a net profit of Rs. 30 crores or more in one of three years.
- At present, there are 54 Miniratna I.

Miniratna Category II

- PSEs that have made profit for the 1st three years and should have a positive net worth. At present, there are 18 Miniratna II.

Sick Industries

- A sick unit is one, which is in existence for at least 5 years and 15% of its net worth has eroded
- To combat industrial sickness particularly with regard to the crucial sectors and timely detection of sick and potentially sick industrial companies, Sick industrial Companies Act, (1985) was enacted.
- SICA provisions were extended to public enterprises in 1993 so as to enable public sector enterprises to be referred to a quasi-judicial body Board of Industrial and Finance Reconstruction (BIFR) to take appropriate measures for revival and rehabilitation.

Small-Scale Industries

- A new thrust in favour of small scale industries was given in the Industrial Policy Resolution of 1977.
- With effect from 2nd October, 2006 government enacted the Micro, Small and Medium Enterprises Development Act.
- The MSME Act, 2006, clearly defines, for the first time, not only the medium enterprises but also extends it to the services sector too according to the Fourth Census (2009) of the MSME sector, 67% are manufacturing and 33% services enterprises.
- MSME sector contributes 8% to the GDP, 45% to the manufactured output, 40% to the exports and provides employment to 42 million people.
- SIDBI (Small Industries Development Bank of India) is a independent financial institution to finance the growth of MSME's.
- Abid Hussain Committee was set-up to look into the problems of small-scale industries.

Micro, Small and Medium Enterprises Policy, 2012

The policy was notified in March, 2012. The policy envisages that every Central Ministry / PSU shall set an annual goal for procurement from the MSE sector with the objective of achieving minimum 20% of the total annual purchase from MSEs in a period of 3 years.

Enterprise	***Manufacturing Sector***	***Service Sector***
Large Enterprise	Investment in Plant and machinery	Investment in Equipment's
Micro Enterprises	Does not exceed Rs.25 lakh	Dose not exceed Rs.10 lakh
Small Enterprises	More than Rs.25 lakh, but does not exceed Rs.5 crore	More than Rs.10 lakh rupees, but does not exceed Rs.2 crore
Medium Enterprises	More than Rs.5 crore, but does not exceed Rs.10 crore	More than Rs.2 crore, but does not exceed Rs.5crore

LARGE SCALE INDUSTRIES

Iron and Steel Industry

- First steel industry at Kulti, Paschim Banga-Bengal Iron Works Company was established in 1870. First large 'scale steel plant-TISCO at Jamshedpur (1907) was followed by ISCO at Burnpur (1919)
- The first public-owned steel plant was Rourkela Integrated Steel Plant set-up in 1954 with the help of German Kampp-Demag.
- India is the fourth largest producer of crude steel in the world after China, Japan and the USA in 2010. In 2009, India was ranked third.
- India is the largest producer of sponge iron since 2002.
- Steel Authority of India Limited (SAIL) was established in 1974 for the development of the steel industry.

Iron and Steel Plants in India

Location	*Assistance*
Rourkela (Odisha)	Germany
Bhiulai(Chhatisgarh)	Russia
Durgapur (Paschim Banga) West Bengal	Britian
Bokaro (Jharkhand)	Russia
Vishakhapatnam (Andhra Pradesh)	Russia

Cotton and Synthetic Textile Industry

- It is the largest industry in India accounting for about 20% of industrial output, provides employment to 20 million persons and contributes 33% to total export earnings. The first Indian modernised cotton cloth mill was established in 1818 at fort Gloster near Kolkata, but this was unsuccessful.
- The second mill was established in 1854 at Bombay by KGN Daber.
- The share of cotton in total cloth production declined from 65% to 50% in 2009-10. Whereas, that of fabrics rose from 27% to 50%
- The organised textile industry comprises of (i) spinning mills; (ii) coarse and medium composite mills and (iii) fine and superfine composite mills.

Jute Industry

- Jute industry was started in 1856 at Rishra and India is the largest

producer and second largest exporter of jute in the world. Jute Technology Mission was launched 2nd June, 2006.

- Government has enacted jute Packing Materials (compulsory use in packing commodities) Act, 1997 to broaden the usage of jute.

Gems and Jewellery

- Gems and jewellery is an important emerging sector in the Indian economy. According to the date released by the World Gold Council (WGC), India is the largest consumer of gold.
- India (especially, Surat and Mumbai) ranks among the 'big four' diamond cutting centres of the world, the other three being, Belgium (Antwerp), the USA (New York) and Israel (Ramat Gan).

Paper Industry

- Paper Industry in India is the 15th largest paper industry in the world. It provides employment to nearly 1.5 million people and contributes Rs.25 billion to the government Skitty.
- The first paper mill in India was set up at Sreerampur, Paschim Banga, in the year of 1862.
- On the basis of raw material, paper industry divided into three parts
  1. Wood based industry
  2. Waste paper based industry
  3. Agro based industry

TNPL

- It was established by Government of Tamilnadu to produce Newsprint and writing paper using Bagasse, a sugarcane residue.
- The factory is situated at Kagithapuram in Karur district, Tamilnadu.

Silk Industry

- India is the second largest (after China) silk manufacturer contributing to 18% of the total raw silk production.
- The majority of silk is produced mainly in Bhoodan Pochampally (also known as silk city), Kanchipuram, Dharamvaram and Mysore.

Sugar Industry

- India is the largest producer of sugar in the world with a 22% share.
- It is the second largest agro-based industry in the country.
- BB Mahajan Committee was set-up to study the sugar industry.
- The Sugar Development Fund was set-up in 1982, under the Sugar Cess Act.
- Dual price mechanism with partial control is applied to sugar industry. Under this, the government fixes the ratio of and free sale sugar quota in the ration 28:72.

Cement Industry

- The foundation of stable Indian cement industry was laid in 1914, when the Indian Cement Company Limited manufactured cement at Porbandar in Gujarat.
- India is the second largest producer of cement in the world.
- The per capita consumption of cement in India is just 68 kg.

Petrochemical Industry

- The real thrust to this industry came with the establishment of Indian Petrochemical Corporation Limited at Baroda.
- Petrochemical industry mainly comprises synthetic fibres, polymers, elastomers, detergents and performance plastics.
- The main source of feedstock and fuel to this industry are natural gas and naphtha
- Kapur Committee was set-up to identify and support the growth of basic petrochemical and their end.

Fertilizer Industry

- The first fertilizer industry was set-up in 1906, in Ranipet near Chennai.
- Indian meets 85% of its urea requirement through indigenous production, but is largely import dependent for meeting the demand for phosphorus (90%) and potassium fertilizer (20%).
- India is the third largest producer of fertilizer after China and USA and second largest consumer after China. Urea is the only fertilizer under statutory price control.

Automotive Industry

- ❖ India is the second largest manufacture of motorcycle and fifth largest manufacturer of commercial vehicles in the world. In 2009, India was the fourth largest exporter of passenger cars after Japan, South Korea and Thailand.

LIST OF OPERATIONAL SEZ OF INDIA			
Exports from SEZs established by Central Government			
No.	**Name of the SEZ**	**Location**	**Type**
1.	Kandla Special Economic Zone	Kandla, Gujarat	Multi product
2.	SEEPZ Special Economic Zone	Mumbai, Maharastra	Electronics and Gems and Jewellery
3.	Noida Special Economic Zone	Uttar Pradesh	Multi product
4.	MEPZ Special Economic Zone	Chennai, Tamil Nadu	Multi product
5.	Cochin Special Economic Zone	Cochin, Kerala	Multi product
6.	Falta Special Economic Zone	Falta, West Bengal	Multi product
7.	Visakhapatnam SEZ	Vishakhapatnam, Andhra Pradesh	Multi product

- ❖ India is the largest manufacturer of tractors in the world. India is the ninth largest car manufacturer in the world.

Unorganised Sector and Informal Economy

- ❖ Unorganised informal workers refer to workers, who are not covered under any social security benefits irrespective of whether they work in organised or unorganised sector. 86% of the total workforce were in the unorganised sector in 2004-05.
- ❖ To look into the problems of unorganised sector, National Commission for Enterprises in the Unorganised Sector was set-up under the Chairmanship of Dr Arjun Sengupta,
- ❖ In accordance with the recommendation of the NCEUS, the Government of India enacted the Unorganised Workers Social Security Act, 2008

- The act came into effect from 16th May, 2009. The act among other things provides for Constitution of a National Social Security Board and State Social Security Board to recommend Social Security Schemes.
- Constitution of record keeping functions by the district administration.

- Constitution of a workers facilitation centre.
- A National Social Security Fund (NSSF) with initial allocation of Rs.1000 crore for the unorganised sector workers has been set-up.
- A National Social Security Board (NSSB) has been constituted in 2009.

National Manufacturing Policy (NMP)

- The NMP was released by the government on 4th November, 2011 to bring about a qualitative and quantitative change with following objectives
- Increase manufacturing growth to 12-14% over the medium term.
- Enable manufacturing to contribute at least 25% of GDP by 2011.
- Create 100 million additional jobs in the manufacturing sector by 2022.
- Provides for National Investment and Manufacturing Zone (NIMZ) on lands, which are degraded and uncultivable.

National Policy on Electronics (NPE), 2011

- NPE was released on 3rd October, 2011 providing for a roadmap for the development of the electronics sector in the country.

Infrastructure in the Indian Economy

- Infrastructural facilities: Often referred to as economic and social overheads, consists of
  - ✓ **Energy** : Coal, Electricity, Oil and non conventional sources.
  - ✓ **Transport** : Railways, roads, shipping and civil aviation.
  - ✓ **Communications** : Posts and telegraph, telephones, telecommunication etc.
  - ✓ Banking, finance and insurance
  - ✓ Science and technology
  - ✓ Social overheads : health and hygiene and education.

Black Economy

- *Parallel or Black Economy refers to the functioning of an illegal sector in the economy whose activities and money generated are not reported to the authorities and thus taxes are not paid on this money.*
- *There are no exact estimates of the size of parallel economy in India but roughly it is 50% of the GDP. This leads to underestimation of NI and encourages corrupt practices in the country.*

The major industrial Centers in India are listed below:

No.	Place	State	Significance
1	Korba	Chhattisgarh	Coal, Power, Aluminium
2	Raipur	Chhattisgarh	Steel, Iron ore, plywood, paper power generation and cement, agriculture
3	Bhilai	Chhattisgarh	Iron and Steel, Power generation, cement, chemical, light and heavy Industries, Railway marshalling yard, fabrication and machining, electronics and electrical works
4	Bhiwandi	Maharashtra	Textiles, Logistics, small and medium Industries
5	Vijayawada	Andhra Pradesh	Auto Parts
6	Firozabad	Uttar Pradesh	Glass and bangle works
7	Panna	Madhya Pradesh	Diamond Mines
8	Panipat	Haryana	Textiles
9	Channapatna	Karnataka	Wooden toys and
11	Varanasi	Uttar Pradesh	Hand-loom
12	Moradabad	Uttar Pradesh	Handicrafts
13	Bareilly	Uttar Pradesh	Handicrafts, Furniture Manufacturing
14	Jamshedpur	Jharkhand	Iron and Steel, Auto parts
15	Bhagalpur	Bihar	Silks
16	Tiruppur	Tamil Nadu	Textiles and garments

17	Rajahmundry	Andhra Pradesh	Textiles, Paper, oil and gas
18	Bokaro Steel City	Jharkhand	Steel and Coal
19	Kolkata	West Bengal	Various
20	Durgapur	West Bengal	Iron and Steel, Power, Cement, Chemicals, Heavy engineering
21	Kharagpur	West Bengal	Chemicals, machinery, heavy metals, Automobiles, Railways, Cement
22	Haldia	West Bengal	Petrochemical, refinery, Industrial chemicals
23	Indore	Madhya Pradesh	garment industries
24	Pithampur	Madhya Pradesh	auto cluster, medicine, cotton yarn, auto testing treck
25	Belagavi	Karnataka	Hydraulics, Heavy tools, Automotive exports, Aerospace, Foundry exports, Tyres, Aluminum works, Handloom and powerloom works, Heavy Forging
26	Dibrugarh	Assam	Tea industries
27	Noida	Uttar Pradesh	Software
28	Kannur	Kerala	Hand-loom Exports
29	Salem	Tamil Nadu	Pig Iron, Steel and Malleable Iron
30	Sivakasi	Tamil Nadu	Safety Matches, Fireworks, Printing and Packaging
31	Kanpur	Uttar Pradesh	Leather, Chemical, Fertilizers, Iron and Steel, Detergents, Food processing Units, Aerospace, Textiles, Footwear, Electronics, Power, Automobiles,
32	Rajkot	Gujarat	Auto-components, Casting and Forgings, Jewelry and Agri machines
33	Kochi	Kerala	Oil refining, Petrochemicals, Ship building, Information Technology, Electronics, Chemicals, Spices, Seafood
34	Peenya	Karnataka	Various
35	Surat	Gujarat	Textiles, Diamond
36	Rourkela	Orissa	Steel and Fertilizer

37	Visakhapatnam	Andhra Pradesh	Steel, Ship Building, Pharmaceutical, Fertilisers, Coffee, Fishing, Petrochemical, Refinery
38	Angul	Orissa	Coal, Aluminium and Electricity (Coal and Water)
39	Rudrapur	Uttarakhand	Automobile, FMCG, Pharmaceutical, Chemicals
40	Ahmedabad	Gujarat	Automobile, Engineering, Pharmaceutical, Chemicals
41	Gandhinagar	Gujarat	Electronics, Laser
42	Jamnagar	Gujarat	Brass Parts, Brass Item Manufacturing
43	Vadodara	Gujarat	Transformer, electric parts, Power, oil unit
44	Bharuch	Gujarat	Petroleum, Petrochemicals, Pharmaceutical, Chemicals, Fertilizer, Metal Fabrication, Ship Building
45	Ludhiana	Punjab	Bicycle Manufacturing, Bicycle parts, Metal Fabrication, machine parts, auto parts, household appliances, hosiery, apparel and garments.
46	Pimpri-Chinchwad	Maharashtra	Automobile, Carplants, Factories etc
47	Mumbai	Maharashtra	Automobiles, Electronics, Entertainment, Finance, Logistics, textiles
48	Bangalore	Karnataka	Biotechnology, Electronics City, Information technology, Silicon Valley of India
49	Trivandrum	Kerala	Aerospace, Biotechnology, Information technology
50	Gajraula	Uttar Pradesh	Chemical, Food Processing Units, Drugs, Fertilisers, FMCG
51	Unnao	Uttar Pradesh	Chemical, Food Processing Units, Leather, Meat processing units, Quilt manufacturing units, Electronics
52	Sri City	Andhra Pradesh	Automotive, Chemicals, Cosmetics, Packaging and labeling, Consumer Products, Plastics, Electrical Components.
53	Margao	Goa	Electricals, Ice Creams, Pharmaceuticals
54	Darjeeling	West Bengal	Tea Industries
54	Nashik	Maharashtra	Automobile Manufacturing, Grapes Export, Pharmaceuticals.

ROLE OF PUBLIC SECTOR AND DISINVESTMENT

Introduction

Public Sector Enterprises (PSEs) or State owned and managed units have played a strategic role in the Indian economy. The key factors contributing to stronghold of these enterprises are the need of rapid industrialization with equitable distribution of economic wealth and inadequacies of free market. India witnessed a greater degree of state ownership and increased regulation since second plan that envisaged industrialization as a development strategy. By 1980s the poor performance of state-owned companies was acknowledged and various efforts were made to improve performance. In an era of economic reform process initiated since1991, privatization has become a key component of public sector policy of the government. The survival of PSEs now depends upon performance efficiency and profitability.

Definition of Public Sector Enterprises

Public Sector Enterprises often referred to as government owned undertakings/enterprises or state-owned enterprises are wholly or partly owned and controlled by the government and produce marketable goods and services i.e. PSEs includes **industrial and commercial enterprises** which are **managed and controlled by government**. Public sector and PSEs are different from each other. The word public sector is wider and includes all kinds of organization commercial (i.e. PSEs) and non-commercial that are owned partly or fully and effectively managed by Government. Thus Government funded universities, colleges, hospitals, schools are part of public sector but are not PSEs because these organizations lack commercial orientation.

Rationale of PSEs In India

The policy rationale for public ownership and government provision of certain goods and services has been based on the presence of some form of market failure, which is addressed through public ownership. In India, PSEs are assigned the responsibility of fulfilling specific social goals like correcting regional and economic imbalances, providing employment and reducing the concentration of monopoly power in the economy. Further, as a pre-requisite for balanced growth, the state controls the key sectors of the economy which is popularly known as the 'commanding heights' rationale of PSEs. The rationale of PSEs in India is discussed as follows:

1. Rapid Economic Development

The prerequisite of faster economic development is the creation of infrastructure and the growth of basic industries like power, steel transportation; communication, banking etc. These industries require huge capital investment and involve long-gestation period and so private sector may not be interested to undertake the development of such industries. Further, the private sector lack financial and technical skills to develop such industries. In other words, reluctance on the part of private entrepreneurs to develop key industries due to high risk and low returns necessitated the establishment of PSEs. Government with its capacity to mobilize huge economic resources can develop the industries that are significant for growth prospects of the country. Thus in the earlier phase of development heavy state spending on investment in basic infrastructural sectors and service facilities(for example financial institutions, telecommunication banking etc.) is essential for providing a congenial atmosphere to the private sector to facilitate the process of accelerated development of the economy.

2. Reduction of Concentration of Economic Powers

PSEs reduce inequalities of income through welfare programmes, favourable pricing policy towards small industries and supply of cheaper goods to the consumer. Private sector may manipulate the price of essential goods

and indulge into quick profit-making by controlling the volume and price of such goods. PSEs prevent such concentration of economic power.

3. Balanced Regional Growth

Private sector generally neglects backward regions that lack infrastructure and other basic facilities such as power, roads, telecommunication, skilled labour etc. PSEs set up large projects in these areas and spend huge cost to develop such areas. In this manner PSEs help to achieve balanced regional growth.

4. Employment Generation

The adequate generation of employment opportunities is a major objective of the public sector enterprises. This sector has provided direct employment to more than 80 % of organized labour.

5. Import-Substitution and Export-Promotion

In the initial period of development foreign exchange constraints exist due to huge imports of capital goods and low exportable surplus. PSEs produce importable goods domestically which tend to save precious foreign exchange and facilitate exports.

6. Resource Mobilization

PSEs mobilize savings through large network of banking and financial institutions. The profits of PSEs are ploughed back into developmental activities of the country. Further, PSEs contribute to the Government's exchequer through payment of tax and dividends.

ROLE AND CONTRIBUTION OF PSEs IN INDIA: RECENT EVIDENCES

The role of PSEs in the provision of social and economic infrastructure has been impressive. It has significant contribution to the country's economy by filling the gaps in the industrial sector, generating employment and balanced regional development. The major contributions of PSEs are explained as under:

Contribution towards Industrial Development and GDP Growth

The role of Indian PSEs in the process of industrialization is widely

acclaimed. The PSEs has helped to build sound and diversified industrial base. The capacity creation by PSEs in basic industries such as generation and distribution of electricity, telecommunication public transportation stood at around 50 %. In case of basic metals fuel and fertilizers it stood at 80 % to 100 %. These industries are central to economic development process of industrialization. PSEs contribute around 27% of total industrial production of the economy. On the eve of the First Five Year Plan there were 5 central public sector enterprises (CPSEs) with a total (financial) investment of Rs. 29 crore. Both the number of enterprises and the investment in CPSEs recorded an overwhelming increase over the years, especially so after the Second Five Year Plan. As on 31st March, 2007, there were a total of 247 CPSEs with a total of Rs. 421089 crores. The contribution of PSEs in the real gross capital formation as clearly indicate that PSEs occupy a significant position in the process of country's capital formation and holds commanding heights of the economy.

As far as the share in national production is concerned, central PSEs in the 1950-51, contribute 3 % of national income which has increased to around 8.23% in 2006-07.

Problems Facing PSEs in India

1. Defective Pricing Policy

The prices of goods and services produced by the PSE in India for long have been determined by Govt. under administered price regimes (APR). In post-91 era with intense market competition Government has dismantled the APR in most cases and PSEs have been given independence to fix their own price competitively. In the recent years various price regulatory commission for regulating prices in best interest of both consumers and producers have been established whose recommendations are applicable both for private and PSEs. Government on its part continues to be sensitive to the needs of the poor and price level in the economy. Any rise in price generally warranted by market conditions is avoided. Pricing of petroleum is an example in this respect. The rise in the international price of crude oil is hardly passed on to the consumers.

The social approach set prices in PSE causes a lower returns and financial losses.

2. Excessive Political Interference

There exists considerable political interference in the operational aspects of PSEs in terms of appointment in the management, pricing of products, location of projects. The decisions are guided by political considerations and not by economic factors.

3. Delays in Decision-Making

The Red-Tapism and bureaucratic management causes delay in decision-making of these organizations. PSEs thus fail to take advantage of opportunities thrown open by the market.

4. Over-Manning

The public sector enterprises are overstaffed. It increases cost of production and inefficiency in the organization.

5. Lack of Accountability

The appraisal system lack performance-based remuneration system. The system lacks incentives to improve and penalties for delays and failures. The security of service makes them lethargic and reduces creativity. This lack of accountability causes inefficiency and losses in the public enterprises.

6. Under-Utilization of Capacity

The public enterprises operate at less than their full capacity and produce lower than potential output. This increase the cost of production as the fixed cost is distributed over small output.

Public Sector Reforms

The Industrial policy resolution of 1956 has been the guiding factor which gave PSEs a strategic role in the economy. Massive investments have been made over the past five decades to build public sector. These enterprises have successfully expanded production, opened up new areas of technology and built up a reserve of technical competence in various areas. Initially, public sector investments were in the key infrastructure areas, but later on it begun to spread in all areas of the economy including non-

infrastructure and non-core areas. Since 1980's, the performance of state owned enterprises has been undergoing a close scrutiny in India. The existence of huge fiscal deficit made it difficult to raise funds at home and abroad. It was felt that the PSEs were absorbing a large chunk of government funds in the form of subsidies, which has resulted in the misallocation of resources brought about by diversion of savings. In order to overcome these problems government allows relaxation in the controls over PSEs and the emphasis was put on efficiency and internal resource generation of these enterprises. The public sector reforms in India since 1991 involves structural changes that aim at increasing efficiency, decentralization, accountability and market orientation of these enterprises. The important reform measures introduced in the recent years are discussed as follows:

1. Allowing Managerial Autonomy

Government has adopted empowerment of PSEs as a continuous process. The management of PSEs has been given operational autonomy in respect of human resource development decisions like recruitment, promotion and other service related decisions. The profit-making enterprises which don't depend on the budgetary support of the government identified as Navratnas and Miniratnas are given enhanced powers to take investment and project -related decisions such as decisions relating to capital expenditure, raising capital from the market, mergers and acquisitions etc. Board of Directors of PSEs exercises the delegated powers subject to the broad guidelines issued by Government. This would help PSEs to mitigate problems relating to delay in decision- making and help to improve the competitive strength of these enterprises.

2. Performance - based Accountability through Memorandum of understanding (MOU) System

MOU is an instrument that specifies mutual responsibilities of two parties who sign it. It is signed between government and management of PSEs. MOU clarifies objectives and targets expected form the management

and performance evaluation takes place with reference to these objectives. Thus it allows management by results and objectives rather than management by controls. Further an attempt is made to evaluate performance of PSEs on the basis of financial and operational performance indicators such as sales, growth in sales and return on assets, dividend pay-out ratio and earning per share.

3. Manpower Rationalization

PSEs for long have been suffering from over manning. Voluntary Retirement Scheme (VRS) has been introduced in a number of PSEs to shed the surplus manpower. In order to provide security net to those who opt for VRS, Counselling, Retraining and Redeployment (CRR) scheme has been launched. CRR aims at retraining employees who have opted for VRS so that the employees can adapt to new vocation after their separation from PSEs.

4. Professionalism in Management

In order to improve efficiency, Board of Directors (BOD) of PSEs has been strengthened with the induction of professional managers. The number of Government nominated directors has been reduced. Management personnel are allowed greater operational autonomy in implementing the policies of the board. Efforts are being made to reduce political and bureaucratic interference in the working of public sector enterprises.

5. Dereservation

The portfolio of the public sector investments has been thoroughly reviewed to focus the public sector on strategic, high-tech and essential infrastructure. The new industrial policy 1991 adopted the policy of dereservation that allowed the entry of private sector in the activities exclusively reserved for public sector. The list of industries reserved solely for the public sector - which used to cover 18 industries, including iron and steel, heavy plant and machinery, telecommunications etc. has been drastically reduced to two: atomic energy generation, and railway transport. These reforms mainly aim at providing competition to the public sector.

6. Transparency in Operations of PSEs

Corporate Governance Code has been formulated to bring greater amount of public accountability and transparency amongst PSEs in an era of competitive environment in 2005. Corporate governance refers to ethical business and transparent conduct of management of organization so as to protect the interest of stakeholders (i.e. shareholders, employees, suppliers etc.).These are the guidelines that management is required to follow in their decision-making process. The code meet the regulatory framework, builds harmonious relations with the stakeholders, provide high degree of accountability to the parliament and the public and ensures transparency in decisions. Further, PSEs are also subject to Right to Information Act (RTI).

7. Revival and Restructuring of Sick PSEs

Efforts are made to modernize and restructure PSEs and revive sick industries. The chronically sick industries have been sold off or closed. Companies having potential for revival have been allowed to be turned around by private sector. In 2004, **Board for Reconstruction of PSE (BRPSE)** has been created to take up restructuring and revival of PSEs. BRPSE is an advisory body which provides measures to strengthen, modernize PSEs. It advises government on disinvestment or closure or sale of chronically sick or loss making units that cannot be revived. It also monitors incipient sickness in PSEs so as to detect their problems at the initial stage that can result into sickness at the later stage. As on 15-7-07, 57 PSEs have been referred to BRPSE.

8. Allowing PSEs to Enter Capital Market

In an era of reduced budgetary support PSEs have been allowed to raise equity finance from the capital market. This has provided a market pressure on PSEs to improve their performance. As investors keep on monitoring the shares listed on stock exchange and market price movements reflect the performance of the company so management remain alert of their

operational efficiency. Further, the listing of PSEs share in the market has offered new opportunities to the investors that have also improved the trading activity of the stock exchanges in India. In the year 2007, 44 central PSEs were listed on the stock exchange. Some of PSE shares are enlisted on the international stock exchange (for example MTNL share is listed on New York stock exchange).

9. Modernization

The new policy provided for modernization of plants, rationalization of productive capacity and changes in the product mix of PSEs. Further PSEs have been allowed to enter into technology joint ventures and have alliance to obtain technology and know-how. **National Investment Fund** has been established in 2005 to provide funds for revival and capital investment requirements of PSEs. The disinvestment proceeds will be channelized to this fund. This would help them to develop competitive strategy based on market needs.

10. Disinvestment and Privatization

Disinvestment in India primarily aims at improving corporate efficiency, financial performance and competition amongst PSEs. It involves transfer of Government holding in PSEs to the private shareholders. Disinvestment introduces competition and market discipline on PSEs and depoliticizes the decision-making process.

Disinvestment and Privatization

The New Economic Policy initiated in July 1991, clearly indicated that the Public Enterprises have shown negative rate of return on capital employed and in wake of economic reforms the role of PSEs have to be redefined so that it should withdraw from the areas where no public purpose is served by its presence, and The public sector should make investment only in those areas where investment is mainly infrastructural in nature and where private sector participants are not likely to come forth to an adequate extent within a reasonable time perspective. In this

direction, Government has decided to adopt disinvestment and privatization policy which is explained as follows**:**

Disinvestment vs. Privatization

Disinvestment refers to the dilution of government's stake in a public enterprise. If the dilution of government's stake involves the transfer of management and control of the enterprise as well then it is referred to as privatization. Thus if the government transfers 51 % or more shares of public enterprise to the private shareholders then this dilution would transfer the majority of decision making power of the government. If less than 50 % government's shareholding is transferred then the effective control would remain in the hands of government and the enterprise is not said to be privatized.

Thus privatization involves the dilution of government's shareholding that also leads to the effective change to management and control. Disinvestment is wider in its meaning that extends to dilution of government's shareholding to a level where there is no change in the control to the dilution that results in the transfer of management i.e privatization.

Objectives of Disinvestment

The following are the main objectives of disinvestment:

i) **To provide fiscal support:** The argument for fiscal support emphasizes that the resources raised through disinvestment must be utilized for retiring past debts and there by bringing down the interest burden of the Government.

ii) **To introduce, competition and market discipline;**

iii) **To find growth;**

iv) **To encourage wider share of ownership in the public enterprises;**

v) **To depoliticise essential services and improve efficiency**.

Modalities of Disinvestment: In India three modalities are used for disinvestment:

(a) **Offering shares of Public Sector Enterprises** at a fixed price through a general prospectus. The offer is made to the general public through

the medium of recognized market intermediaries.

(b) Sale of Equity or Strategic Sale through Auction of share amongst predetermined clientele, whose number can be large. The reserve price for the PSE's equity can be determined with the assistance of merchant bankers. In case of strategic sale, government retained a part of the equity with it, though management control is transferred to the strategic partner. The strategic partner is required to purchase an equity stake which is large enough to ensure a workable majority.

(c) Offer for Sale determining the fixed price for sale of a public enterprise, inviting open bidders and accepting highest bidder's quotation for sale.

Until 1999-2000, it was primarily the sale of minority shares of CPSEs in small lots. From 1999-2000 till 2003-04, the emphasis of disinvestment changed in favour of **'Strategic Sale'.** Currently, the emphasis is on listing of unlisted profitable CPSEs (other than the Navratnas) each with a **'net worth'** in excess of Rs. 200 crore, through Initial Public Offerings (IPOs). It also involves sale of minority shareholding of the Government in listed, profitable CPSEs either in conjunction with a Public Issue of fresh equity by the CPSE concerned or independently by the Government, subject to the residual equity of the Government being at least 51 % and the Government retaining management control of the CPSE. Thus the emphasis is on the wider public participation in the disinvestment process.

Progress of Disinvestment

The Government in July 1991 initiated the disinvestment process in India, while launching the New Economic Policy**(NEP)**. The crucial shift in the Government policy for disinvestment of PSE's was mainly attributable to poor performance of these enterprises and burden of financing their requirements through budget allocations. In 1991, there were 236 operating public sector undertakings, of which only 123 was profit making. The top 20 profit

making PSE's accounted for 80 % of the profits, implying that less than 10 % of the PSE's were responsible for 80 % of profits. The return on public sector investment for the year 1990-91 was a just over 2 %.

If we visualize the progress of disinvestment in the Central Government undertakings from 1991-2007, the disinvestment proceeds are encouraging but have been far lower than the target except for few years. Till 2007, cumulative amount Rs.49, 241.64 crore have been collected from disinvestment proceeds.

The reasons for such low proportion of disinvestment proceeds as against the target set were identified and presented below:

(i) The unfavourable market conditions are the main reason responsible for this down ward trend of disinvestment.

(ii) The offers made by the Government for disinvestment of PSEs are not attractive and stringent bureaucratic procedures cause the discouraging of the private sector investors.

(iii) The valuation process, procedures and surplus employees are other factors hindering the disinvestment process.

(iv) The Government is not transparent about its approach towards sequencing the restructuring and the methods of privatisation of PSE's.

Disinvestment Policy in India: Evolution and Recent Initiatives

The disinvestment of the Government's equity in CPSEs started in 1991-92, when minority shareholding of the Central Government in 30 individual CPSEs was sold to selected financial institutions (LIC, GIC, and UTI) in bundles. The shares were sold in bundles to ensure that along with the attractive shares, the not so attractive shares also got sold. The Rangarajan Committee recommended in April, 1993, that the %age of equity to be disinvested should be generally under 49 per cent in industries reserved for the public sector and over 74 per cent in other industries. The Disinvestment Commission was established in the

year 1996-97 to advise Government on disinvestment issues. Government has now emphasized the divestment in the non-strategic PSEs even below 26 %. Since 2000, the increasing emphasis is placed on strategic sale and the entire proceeds from disinvestment/privatization is decided to be deployed in social sector, restructuring of PSEs and retirement of public debts. At present the emphasis is placed on public offering of shares to the public. The **salient features of recent disinvestment policy** since 2004 of the Government with respect to Central Public Sector Enterprises (CPSEs) are as follows:

(i) The profit-making companies on principle are generally not privatized. Privatization is considered on a transparent and consultative case-by-case basis. The existing "Navratnas" companies in the public sector are allowed to raise resources from the capital market.

(ii) The efforts are made to modernize and restructure sick public sector companies and revive sick industry. The chronically loss-making companies are sold-off, or closed, after all the workers have got their legitimate dues and compensation. The private industry is inducted to turn around companies that have potential for revival.

(iii) The disinvestment proceeds are used to provide resources for social needs and to meet investment requirements of profitable and revivable units. **National Investment Fund** has been created in 2005 for this purpose that would channelize the disinvestment proceeds.

DEVELOPMENT OF INFRASTRUCTURE

DEVELOPMENT OF INFRASTRUCTURE

Railways:

- Indian Railways is the biggest national undertaking. The first Indian railway train rolled on its 34 km track from Bombay (Mumbai) to Thane on April 16, 1853
- Indian Railway system is the largest railway system in Asia and second in the world (First America)
- The number of stations, at present is 1,030.
- The total length of Indian railways is 63,030 km
- At present, Indian railways have 8.593 engines, 51,030 passengers compartments, 6,505 other compartments for other passenger trains and 2,19,931 goods compartments.
- About 29 per cent of the railways routes have been electrified.
- At present, Indian railways have 42 steam engines, 5,022 diesel engines and 3,825 electric engines.
- Railway finance is separate since 1924 – 1925 from the general revenue.
- Now merged, 2018 onwards a single budget is prepared.
- The only oldest running engine is Fairy queen.
- The first electric train rolled on from Mumbai to Kurla on 3rd February 1925.
- Kolkata Metro Rail is the first underground rail.
- The longest railway platform of the world is Kharagpur. Its length is 2,733 feet.
- The longest tunnel of Indian railways on Konkan Railways is 6.5 km long.
- Indian Railway board was established in 1905.
- Indian Railway have three gauges broad gauge, metre gauge and narrow gauge.
- At present, there are 19 Railway recruitment boards.

- In railways, there are AC, first class and second class. Third class was removed in 1974.
- Computer reservation facility covering the 95 per cent of the passenger population, is available at over 300 locations in the country.
- Nehru Setu is the longest railway bridge built on river Son.
- Himsagar Express travels 66 hours from Jammu Tavi to Kanyakumari (3,751 km)
- Recently national rail Vikas yojana (NRVY) was launched to increase the speed to enhance quadrilateral network connecting all metros (superfast + double line) and to connect the ports.
- Konkan Railway is run by a separate corporation and it runs from Mangalore to Roha (40 km south of Mumbai)
- Four states involved in this network are Maharashtra, Goa, Karnataka and Kerala. It does not pass through Kerala.
- 51 per cent of the shares of Konkan rail way is with Indian Railways,
- It has the fastest of tracks in India
- Total length is 760 km
- 10 percent of the line passes through tunnels.
- Longest tunnel is near Ratnagiri in Karbude 6.5 km.
- Rail density is maximum in North Indian plains because of its levelled surface and very high density of population.
- Railway density in hills and plateaus are quite low.
- East coast has more railway lines than west coast.
- Rail route per 1000 sq. km is maximum in Punjab (42 kms.) then West Bengal, Haryana, Bihar, U.P
- Indian average rail route density is 18.6 km / 1000 sq.km.
- Chhatrapati Shivaji Terminus, Mumbai first Indian railway station appear in World Heritage site.

Railways			
Gauge	**Route Km**	**Running Track Km**	**Total Track Km**
Broad Gauge (1,676 mm)	54,257	76,758	1,01,486
Metre Gauge (1,000mm)	7,180	7,792	9,290
Narrow gauge (762mm & 610mm)	2,537	2,537	2,481
Total	63,974	87,087	1,13,617

Railway Manufacturing units

Name	Locations	Estd.in	Item manufactured
Chittranjan Loco motive works	Chittranjan	1950	Originally manufactured steam engines, now electric and diesel engines
Diesel Locomotive	Varnasi	1964	Diesel engines and electric shunters
Integral Coach Factory	Perambur	1955	B.G., M.G.,. Coaches, A.C. Coaches
Whell and Axle plant	Yelahanka	1983	Whells of axis
Diesel component works	Patiala		Components of diesel engines
Rail coach factory	Kapurthala	1988	Rail Coaches.

Railway Zones

S. No	Name	Date Established	Head Quarters	Divisions
1.	Central	1951, November 5	Mumbai	Mumbai, Bhusawal, Pune, Solapur, Nagpur
2.	East Central	2002, October 1	Hajipur	Danapur, Dhanbad, Mughalsaria
3.	Eastern coast	2003, April 1	Bhubaneswar	Khurda Road, Sambalpur, Visakhapatnam,
4.	Eastern	1952, April	Kolkata	Howrah, Sealdah, Asansol, Malda
5.	North Eastern	1952	Gorakhpur	Izzartnagr, Lucknow,

				Varanasi
6.	North Central	2003, April	Allahabad	Allahabad, Agra, Jhansi
7.	North Western	2002, October 1	Jaipur	Jaipur, Ajmer, Bikaaner, jodhpur
8.	Northeast frontier	1958, 15th Jan	Guwahati	Allpurduar, Kathihar, Rangia, Kumding, Tinsukaia
9.	Northern	1952 April 14	Delhi	Delhi, Ambala, Firozpur, Lucknow, Moradabad
10.	South Central	1966 October 2	Secunderabad	Secunderabad, Hyderabad, Guntakal, Guntur, Nanded, Vijayawada
11.	South East central	2003, April 1	Bilaspur	Bilaspur, Raipur
12.	South Eastern	1955	Kolkata	Adra, Chankradharpur, Kharagpur, Ranchi, Hubli, Bangalore, Mysore
13.	South Western	2003, April 1	Hubli	Hubli, Bangalore, Mysore
14.	Southern	1951 April 14	Chennai	Chennai, Tiruchirappalli, Madurai, Palakkad, Salem, Trivandrum (Thiruvananthapuram)
15.	West central 2003, April 1	2003, April 1	Jabalpur	Jabalpur, Bhopal, kota
16.	Western	1951, November 5	Mumbai	Mumbai central, Rajkot, Bhavnagar, Ahmedabad, Vadodara
17.	Kolkata Metro	2010 December 31	Kolkata	Kolkata

Road Ways :

- The road network in India is one of the largest in the world.
- The total length of roads, at present is 33 lakhs kms.
- The total length of metalled road excluding roads constructed under Jawahar Rozgar Yojana is 13,94,061 km and un metalled roads is 10,71,816 km.
- The central government owns the responsibility of 79,243 km long national high ways.
- Border road organisation was established in 1960.

Rajiv Gandhi international Airport (Hyderabad) has achieved Carbon natural states (5-15 million category) and 1st in Asia Pacific region.

- Though the national highways do not constitute even 1.7 per cent of the total road length of the country, they bear about 40 per cent of the traffic.
- Number of vehicles has been growing at an average pace of 10.16% per annum over the last five years.
- Maharashtra has the highest length of roads (2,35,595 km) where case the lowest length of road has Lakshadweep (1km)

National Highway Development Programme (NHDP)

1. The Golden Quadrilateral Project involves connectivity of
   a) Delhi to Kolkata 1453 km (NH2)
   b) Delhi to Mumbai 1419 km (NH8, NH76 and NH 79)
   c) Mumbai to Chennai 1290 km (NH4, NH7 and NH46)
   d) Chennai to Kolkata 1684 km (NH5, NH6 and NH60)

2. North – South and East – West Corridors

   a) NS corridor connects Srinagar to Kanyakumari
   b) EW corridor cross each other at Jhansi (UP)
      - ✓ NS and EW corridors cross each other at Jhansi (UP)
      - ✓ Total length of this project us 7300 km.

3. Maximum length of corridors is in Tamil Nadu (851 km) followed Uttar Pradesh (856 kms)
4. National Highways Development project has been launched to link the four corners of the country by four or six lanes in a network. The

four major cities – Kolkata, Delhi, Chennai and Mumbai will be linked by 5.846 km long roads in golden quadrilateral.

Classification of roads: National Highways :

- ❖ It is constructed and maintained by CPWD (Central Public Works Department)
- ❖ These are for inter – state and strategic movement and connect the state capitals.
- ❖ They carry nearly 40 per cent of the road traffic in India
- ❖ Total Length is 79,243 km.

State Highways :

- ❖ Constructed and maintained by state governments.
- ❖ They join the state capital with district headquarters.
- ❖ Total length is 1,31,899 km
- ❖ National highways development project has been launched to link the four corners of the country by four or six lanes in a network.
- ❖ The four major cities – Kolkata, Delhi, Chennai and Mumbai will be linked by 5,846km long road in golden quadrilateral.

District Highways :

- ❖ Construction and maintenance falls under the purview of Zilla parishads.
- ❖ They join district head quarters with tehsils and Blocks
- ❖ Total length is 4,67,763 km.

International Airports	***City***
Negumpet airport	Hyderabad
Calicut international airport	Calicut
Chhatrapati Shivaji International Airport	Mumbai
HAL airport	Bengaluru
Goa airport in Vasco Di Gama City	Goa
Netaji Subhash Chandra Bose International Airport	Thiruvanthapuram
Lok priya Gopinath Bordoloi international airport	Ahmedabad
Indira Gandhi International Airport	Delhi
Chennai international airport	Chennai
Raja Sansi international airport	Amritsar

Village Roads:

- Responsibility of village Panchayats
- Connects the villages with neighbouring towns
- Total length is 26,50,000 km

Airways :

- JRD Tata was the first person to take a solo flight from Mumbai to Karachi in 1931.
- In 1935, the Tata Air Lines started its operation between Mumbai and Thiruvananthapuram and in 1937 between Mumbai and Delhi
- In 1953, all the private air line companies were nationalized and Indian Airlines and air India came into existence.
- Vayaudoot limited started in 1981 as a private air carrier and later on it was merged with Indian Airlines.
- International airports authority of India and National airports authority were merged on 1995 to form airports authority of India.
- Merger of Air India and Indian Airlines There are 12 International airports
- Indian air lines operates to 54 domestic stations along with its subsidiary

Water Ways :

- India has 7,516 km long coast line
- Shipping corporation of India is the biggest shipping line of the country having the longest number of vessels.
- India has the largest merchant shipping tonnage.
- The total length of navigation water ways in India comprising river canals, backwaters etc is 14,500 km out of which 3700 km is navigable by mechanised boats.
- The public sector company, the shipping corporation of India limited has established on 2nd October 1961.
- There are 13 major ports in country apart from about 187 minor ports. Major ports are under central government and others are maintained by state government.
- India has about 200 ports with 13 major and the rest intermediate and minor.

Major Waterways of India

Numbers	*Stretches of the Water Way*	*Specifications*
NW1	Allahabad-Haldia(1629 km)	Along Ganga river
NW2	Sadiya – Dhubri (819 km)	Along Brahmaputra river
NW3	Kottapuram – Kollam (186 km)	Along Champakara and Udyogmandal canal
NW4	Bhadrachalam to Rajahmundri and Wazirabad to Vijaywada (1100 km)	Along Godavari and Krishna river
NW5	Mangalgarhi to Paradeep and Talcher to Dhamara (1623 km)	Along Mahanadi and Brahmini river system
NW6	Lakhpur to Bhanga (121 km)	Along Barak river

First International Telephone Line:1870, between London and Mumbai

Ports in India

- The Water ways Authority in India divides Indian ports into three categories, major, minor and intermediate ports.
- India has about 190 ports, with 13 major and the rest intermediate and minor.

Eastern Coast Ports

Ports of Eastern Coast	**Important Fact**
Kolkata	Oldest Port, India's riverine port having two dock system
Paradip	It handles iron-ore and some amounts of coal and dry cargo
Vishakapattinam	Natural Port.
Chennai	All weather port having deep drafted berth, oil jetties, iron-one terminals etc.
Tuticorin	Artificial deep sea harbour, all weather port offer direct weekly container service to USA
Ennore	First corporatized major port in India
Western Coast Ports	
Ports of Western Coast	**Important Fact**

Mumbai	It handle maximum traffic, natural harbour, it handles mostly petroleum and dry cargo
Kandla	Tidal port and important traffic handled are crude oil, petroleum, edible oil, food grains.
Marmagoa	It handles iron one. It has a naval base
New Mangalore	It is an all weather port
Cochin	Major natural port on Willington Island
Jawaharlal Nehru	It is called as Nihava Sheva

- Largest container port of India is Jawaharlal Nehru port in Mumbai. The largest natural port is in Vishakhapatnam.
- Kandla in Gujarat is a tidal port. It has been made into a free trade zone.
- New Mangalore port is also called the 'Gateway of Karnataka'
- Mumbai port is the busiest port of India.

COMMUNICATION SYSTEM

POSTAL SERVICES

- One Indian Postal network is the largest postal network in the world with approx. 1,54,979 post offices of which 1,39,182 are in rural area and 15,797 are in urban areas.
- On an average a post-office serves an area of 21.21 sq. km. and a population of 7.176.
- The Department has about 2.06 lakh departmental employees and about 2.69 lakh Gramin Dak Sevaks.

TELECOMMUNICATION

- Almost all the Indian cities and town have access to telephone new-work along with more than 50 per cent villages.
- A Telecommunication research centre was set-up in 1955-56.
- Luxemberg has highest mobile density in The World and Hong-Kong comes next.
- The Indian telecommunications network with 846.33 million telephone connections at the end of March, 2011 is the second largest in the world.
- With its 811.60 million wireless phones at the end of March, 2011 India has the second largest wireless network in the world.

- ✓ First Postal Service Started:1837
- ✓ First Postal Stamp Issued:1852 in Karachi (provincial)
- ✓ First all-India Postal Stamp Issued:1854
- ✓ Establishment of Postal Department:1854
- ✓ Money-order Service Started:1880
- ✓ Post Office Saving Bank Started:1882
- ✓ Airmail Service Started:1911
- ✓ Speed-Post introduced: August 01, 1986
- ✓ Post-shoppee Introduced: August 1994
- ✓ e-Post Introduced: August 02, 2001
- ✓ Gramin Sanchar Sewak Scheme (GSS): 24 December, 2002
- ✓ First telegraph line:1851, between Calcutta and Diamond Harbour
- ✓ First telephone Exchange:1881 in Calcutta
- ✓ Telegraph system discontinue from 2013

First automatic Exchange:1913 in Shimla

NATIONAL INCOME RURAL WELFARE ORIENTED PROGRAMMES

According to the national income estimation committee of 1949,

- National income measures the volume of commodities and services produced during a given period counted without duplication.
- Commonly it is called as national dividend .
- It is a measure of the economic performance of an economy.
- National income is a flow concept and it is calculated annually.

Paul A. Samuelson defines

- "GNP(national income) is the most comprehensive measure of a nation's total output of goods and services.

National wealth :

- It is the measurement of the present assets available at a given time.
- It is a stock concept.

Measures:

1. Gross Domestic Product(GDP)
2. Net Domestic Product (NDP)
3. Gross National Product(GNP)
4. Net National Product(NNP)
5. Net National Product at Factor Cost (NNP) FC
6. Per capita income(PCI)
7. Net National income (NNI)
8. Personal Income(PI)
9. Disposable Personal Income (DPI)

1. Gross Domestic Product :

- It is the total value of all final goods and services produced within the boundary of the country during a given period of time, generally one year.
- Here the produce of both resident citizens and foreign nationals who reside within that boundary is considered.
- In GDP, income generated by foreigners in a country is included, but income generated by nationals of a country outside the country is not included.

Difference between GDP and GNP

- In GDP, goods and services produced in a country are 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. In other words, international trade is included in calculation.
- GNP = GDP + X – M
- X = Export
- M = Import

- *In India, the financial year is from 1st April to 31st march.*

2. Net Domestic Product :

- NDP is net domestic product which is the sum total of money value of final goods and services produced in the country in an accounting year excluding depreciation cost.

NDP = GDP - Depreciation

- Decline in the value of capital assets due to tear and wear is measured as depreciation.

3. Gross National Product :

- GNP is the total value of the total output or production of final goods and services produced by the residents of a country during a given period of time, generally one year. (April 1st March -31)

GNP = GDP + Net factor income from abroad(X-M)

Nominal GNP: GNP measured in terms of current market prices is called nominal GNP.

Real GNP: GNP computed at constant prices (base year price) is called real GNP.

In a closed economy, (X = M = 0),then GDP = GNP.

4. Net National Product :

- NNP is obtained after deducting Depreciation from GNP.
- Depreciation means wear and tear of goods produced.
- It is calculated with market price

NNP = GNP – Depreciation

State with highest per capita income (2015-2016) - Goa (overall-Delhi) – 2017-18 Andhra Pradesh

5. NNP at Factor Cost :

- NNP at factor cost calculates national income only on the basis of cost incurred to produce the goods and services.
- This cost is the payment made to the factors of production (in land, labor, capital, organization)
- Net National Product at factor cost is also known as National Income. i.e. NNPFC = National Income
- NNP at Factor Cost = NNP at Market Price – Indirect taxes + subsidy

Factor Cost (land + Labour + capital + Organization)

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

Market Price (MP)

- 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 subsides added to the market price, we get the value of national income at factor cost.
- MP = FC + Indirect taxes – Subsidies

NNP at constant price

- It means the total quantity of all final goods and services produced in a particular year multiplied by the price of base year(constant price).
- It is computed based on the real worth of the purchasing power of income, it is also called as 'real national income' or national income in 'real' terms.

NNP at current price

- It means the total quantity of all final goods and services produced in a particular year multiplied by the price of that particular year(current price).
- The income calculated by this method is called the nominal income

Base year :

- A base year is the year used for comparison for the level of a particular economic index.
- In India, base year has been shifted seven times so far i.e.1960-61,1970-71,1980-81, 1993-94, 1999-2000, 2004-05 and 2011-12 is the new base year.

6. Per Capita income :

- It is the output per person. It is an indicator to show the standard of living in a country.
- It is obtained by dividing the National Income by the population of a country.

$$\text{PCI} = \frac{NNPFC(National\ Income)}{Total\ population}$$

Personal Income :

- Personal Income is the sum of all the income received by the entire people of the country in a year.
- PI = National Income + {(Transfer Payments)-(Undistributed profits of corporate + Payments for social security provisions)}
- PI = National Income(NNPFC) + Net transfer payment
- PI = NNI - Retained earnings, corporate taxes and interest on public debt

7. Personal Income :

- Personal Income , is the income of the residents (individual) of a country.
- To calculate personal income transfer of payments to individual are added to national income, while social security provision contributions.
- Corporate tax and undistributed profile are subtracted.

P.I = National Income + Transfer of payments – social security contributed – corporate tax – undistributed profile.

8. Disposable personal income (DPI)

- It is the income of the individuals at their disposal after paying

DPI = personal income – Direct taxes (eg. Income tax) + Subsidy

National income growth :

- ❖ National income growth at current price = (national income of this year at current price - national income of previous year at current price)*100/(national income of previous year at current price)
- ❖ It shows positive growth of the country.
- ❖ National income growth at constant price = (national income of this year at constant price - national income of previous year at constant price)*100/(national income of previous year at constant price)
- ❖ It shows negative growth of the country.

State income :

- ❖ It refers to the total money value of goods and services produced in the state during a year.
- ❖ Per capita state income can be calculated by dividing state income of the year by population of the year in the state.
- ❖ The state income is calculated in the form of net state domestic product at factor cost.

June 29th
National Statistics Day

GDP Deflator:

- ❖ It is a measure of the level of prices of all domestically produced goods and services in an economy in a particular period of time.
- ❖ This is calculated to find the overall rise in the level of price.
- ❖ GDP Deflator = (Nominal GDP / Real GDP) × 100

National Income series in India

- ❖ National Income of India for the post independence period has been estimated in four different series.

They are :

1. The conventional series
2. The Revised Series
3. A new series
4. CSO's latest series (Central Statistical Organisation).

Methods of measuring national income:

1. Product or Output method,
2. Income method,
3. Expenditure or Consumption method

1. Product Method :

- ✓ In this method, national income is measured as a flow of goods and services.
- ✓ Here the measures of national income are calculated by adding the total value of the output (goods and services) product by all activities during any given period, such as product or value

added method estimates National Income from the output side.

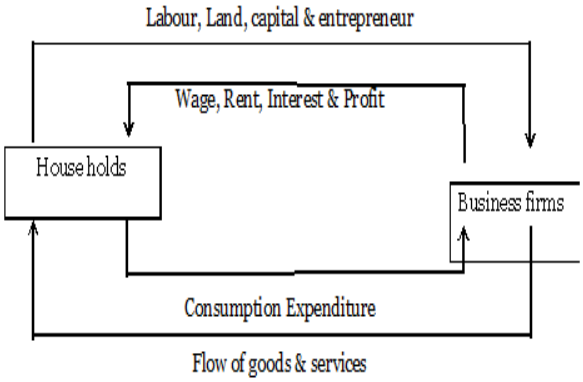
- ✓ The major challenge of this method is the problem of double-counting.
- ✓ This problem can be avoided by including only the value added at each stage of production or by adding only the final value of output produced.

2. Income Method:

- ✓ Under this method, national income is measured as a flow of factor incomes.
- ✓ In this method income and payment received by all the people in the country are calculated,
- ✓ Generally four factors of production labour (wage), capital (interest), land (rent) and entrepreneurship (profit).
- ✓ National income = total wage + total rent + total interest + total profit
- ✓ Circular flow of income
  1. Product / output method
  2. Income method
  3. Expenditure/Consumption

3. Expenditure Method:

- ❖ In this method, national income is measured as a flow of expenditure.
- ❖ In this method we add up the expenditure of all people on consumer goods, investment and saving.
- ❖ Expenditure method estimates National Income from the expenditure side (consumption expenditure +investment expenditure + Government expenditure + Net exports) . Symbolically ,
- ❖ GDP = E = C + I + G + (X-M)
- ❖ Where E is aggregate expenditure.
- ❖ National Income of service sector is calculated by income method.
- ❖ In India the households do not maintain proper accounts, hence expenditure method is not widely used in India.
- ❖ Production method is applied in entire primary sector & registered manufacturing sub-sector.
- ❖ Income method is applied to all other sectors except construction sub-sector.
- ❖ A combination of production & expenditure method is used in construction sub-sectors.



State with lowest per capita income (2015-16) & 2017-18 - Bihar

Reconciliation of the three methods:-

Value added method	*Income method*	*Expenditure method*
Sum of GVAmp of all industrial sectors	Compensation of employee + Rent + Interest+ Profit	Private final consumption expenditure + Govt. final consumption expenditure + Gross domestic capital formation + Net exports
= GDP mp Consumption of fixed capital taxes Indirect taxes + Subsidies + Net factor income from abroad	= GDP_{FC} + Net factor income from Abroad Taxes	= GDPmp Consumption of fixed capital Taxes Indirect taxes + Subsidies + Net factor income from abroad
= NNP_{FC}	= NNP_{FC}	= NNP_{FC}

- For calculation of National Income CSO divided the economy into Primary sector - extraction & production of natural resources (Agri, forestry, fishing, minoring, quacking etc.)
- Secondary sector - processing of materials which have extracted at primary state.
- (Electricity, Jewellery, making gas supply, registered & unregistered manufacturing, water supply etc.)
- Tertiary sector - Providing support & services to primary & secondary sector (Trade, Hotel, Transport, Storage, Communication, Banking & Insurance, Health, Education etc.)

Indian Association for Research in National Income and Wealth (IARNIW)-1964

Difficulties in the calculation of National Income

1. Black money
2. Non-monetization
3. Double counting
4. Unscientific and unreliable data
5. Exclusion of Household services and social services.

Incremental Capital Output Ratio (ICOR):

- Capital to Output ratio is the ratio between capital and output.
  COR = Capital / Output
- It shows the amount of capital required to produce a product.
- It is used to are as a country's level or production efficiency.
- ICOR means the additional amount of capital required to produce additional product.
- ICOR equals, Annual investment, Annual increase in GDP.

- ICOR = Incremental Capital / Incremental Output
- It helps to calculate the amount of capital investment required to achieve a target growth rate.

- Growth Rate = Capital Investment / ICOR
- Higher levels of ICOR mean that capital is not being used efficiently to increase production.

Estimates of National Income in India :

- The calculation of National Income dates back to pre-independence period.

Pre Independence :

- In 1868, Dadabhai Naoroji wrote a book named "Poverty and Un British Rule in India". In that book, he estimated per capita income of Indians as 20.
- Other estimators are William Digby in the year 1899, Findlay Shirras in 1911, 1922 and in 1933,wadia and joshi in 1913, Shah and Khambatta in 1921, V K R V Rao during 1925-29 and 1931-32 and R C Desai during 1931-40.
- For the period of 1925-29 , Dr. V.K.R.V.Rao calculated per capita income of Indians as 76. He was the first person to estimate National Income scientifically with a proper method in 1931-32 and calculated PCI as 62.
- He divided the entire economy into 2 sectors viz agriculture and industrial sector.

Post Independence :

Organizations In India Related To National Income Accounts

National Income Committee (NIC)

- Government of India appointed the NIC in August, 1949 with Prof. PC. Mahalanobis as its Chairman and Prof. D.R. Gadgil and Dr. V.K.R.V. Rao as its two members
- For the estimation of national income, it applied a mixture of both 'Product Method' and the 'Income Method'.
- It divided the entire economy into 13 sectors
- It submitted its first report in 1951 and reported that the per capita income was 265 .
- It submitted its final report in 1954 and reported that the per capita income was 246.50 for the period of 1950-54.

Central Statistical Organisation (CSO)

- CSO was set up in *1949 in* Delhi.

- Functions-preparing and publishing national accounts statistics, industrial statistics, conducting economic census.
- The Industrial Statistics Wing of CSO is located in Kolkata.
- The first official estimate by CSO was in 1956 with base year 1948-49.

National statistical organization

- The Government of India ordered the setting up of a permanent National Statistical Commission (NSC) on 1st June 2005 under the recommendations of the Rangarajan Committee (2000-01).
- The NSC was constituted for the first time on 12th July 2006 for promoting statistical network in the country.
- It was then headed by prof SD Tendulkar.

National Sample Survey Org

- Set up in 1950 for conducting large scale sample survey to meet the data needs of the country, for the estimation of national income other aggregate.

20th October : World Statistics Day

RURAL DEVELOPMENT

Gram Swaraj Abhiyan

- In continuation of "Gram Swaraj Abhiyan", started from 14th April on the occasion of Ambedkar Jayanti, Govt. of India has extended it in 117 Aspirational Districts identified by the NITI Aayog.
- This campaign which, undertaken under "Sabka Sath, Sabka Gaon, Sabka Vikas", is to promote social harmony, spread awareness about pro-poor initiatives of the government, reach out to poor households to enroll them as also to obtain their feedback on various welfare programmes.
- During this abhiyan, saturation of eligible households/persons would be made under seven flagship pro-poor programmes namely, Pradhan Mantri Ujjwala Yojana, Saubhagya, Ujala scheme, Pradhan Mantri Jan Dhan Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Suraksha Bima Yojana and Mission Indradhanush.
- In addition, 5 priority activities under Education, Health, Nutrition, Skills and Agriculture also been identified as per district plan.

About Mission Antyodaya

Mission Antyodaya is a convergence framework for measurable effective outcomes on parameters that transform lives and livelihoods. Real Difference comes about through Convergence as it alone simultaneously addresses multi dimensions of poverty. Professionals, Institutions and Enterprises make it possible.

1. Evidence of convergence reducing poverty, raising incomes - IRMA Study.
2. 'Communitization' through Women SHGs improves education, health, nutrition indicators
3. Saturation approach creates many more 'islands of success' – Ex: Hivre Bazaar
4. Leveraging Bank loans promotes an enterprise model.

5. Many initiatives provide for universal coverage of the eligible beneficiaries - Ujwala, internet, Bank accounts.
6. Integral positive co-relation among infrastructure, human development and sustainable economic well-being.
7. 5000 islands of successful Rural Clusters over 1000 days will be transformational.

Mahatma Gandhi National Rural Employment Guarantee Act

- The National Rural Employment Guarantee Act 2005 (NREGA) is a social security scheme that attempts to provide employment and livelihood to rural labours in the country.
- In an effort to make inclusive and overall development a reality, the NREGA was passed as a labour law and implemented across 200 districts in 2006. By 2008, it came to cover the entire country.
- The scheme was designed to provide any willing adult who registers for rural employment, a minimum job guarantee of 100 days each financial year.
- This includes non-skilled work, making it one-of-its-kind across the world. It was later renamed the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The MGNREGA is an entitlement to work that every adult citizen holds.
- In case such employment is not provided within 15 days of registration, the applicant becomes eligible for an unemployment allowance.

The implementation of MGNREGA was left to the Gram Panchayats.

- According to government sources, since the inception of the scheme, the government of India has incurred a total expenditure of INR 483399.51 crores towards the scheme, thereby employing 72,85,831

workers on 11,08,565 worksites (data as on 01.10.2018).

- ❖ The minimum wages initially determined were INR 100 a day, but later revised in keeping with the state labour employment conventions. The minimum wages are now determined by the states and range between INR 163 in Bihar to INR 500 in Kerala.
- ❖ The MGNREGA has been at the receiving end of much criticism over the years. From being criticised for encouraging corruption to increasing inequality to being called an election card for the UPA – the scheme has been picked apart for a variety of reasons.
- ❖ Apart from causing a major financial drain on the country's resources, the actual benefits of the scheme do not reach the rural labourers, detractors claim.

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) Antyodaya Diwas

- The Ministry of Rural Development (MoRD) announced the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) Antyodaya Diwas, on 25th September 2014. DDU-GKY is a part of the National Rural Livelihood Mission (NRLM), tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth.
- DDU-GKY is uniquely focused on rural youth between the ages of 15 and 35 years from poor families.
- As a part of the Skill India campaign, it plays an instrumental role in supporting the social and economic programs of the government like the Make In India, Digital India, Smart Cities and Start-Up India, Stand-Up India campaigns.
- Over 180 million or 69% of the country's youth population

between the ages of 18 and 34 years, live in its rural areas.

- Of these, the bottom of the pyramid youth from poor families with no or marginal employment number about 55 million.

Pradhan Mantri Suraksha Bima Yojana(PMSBY)

- The Scheme is available to people in the age group 18 to 70 years with a bank account who give their consent to join / enable auto-debit on or before 31st May for the coverage period 1st June to 31st May on an annual renewal basis.
- Aadhar would be the primary KYC for the bank account. The risk coverage under the scheme is Rs.2 lakh for accidental death and full disability and Rs. 1 lakh for partial disability.
- The premium of Rs.12 per annum is to be deducted from the account holder's bank account through 'auto-debit' facility in one installment.
- The scheme is being offered by Public Sector General Insurance Companies or any other General Insurance Company who are willing to offer the product on similar terms with necessary approvals and tie up with banks for this purpose.

DEENDAYAL ANTYODAYA YOJANA - NRLM

- Aajeevika - National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in June 2011.
- Aided in part through investment support by the World Bank, the Mission aims at creating efficient and effective institutional platforms of the rural poor, enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.
- NRLM set out with an agenda to cover 7 Crore rural poor households, across 600 districts, 6000 blocks, 2.5 lakh Gram Panchayats and 6 lakh villages in the country through self-

managed Self Help Groups (SHGs) and federated institutions and support them for livelihoods collectives in a period of 8-10 years.

- In addition, the poor would be facilitated to achieve increased access to rights, entitlements and public services, diversified risk and better social indicators of empowerment. DAY-NRLM believes in harnessing the innate capabilities of the poor and complements them with capacities (information, knowledge, skills, tools, finance and collectivization) to participate in the growing economy of the country.
- In November 2015, the program was renamed Deendayal Antayodaya Yojana (DAY-NRLM).

National Social Assistance Programme(NSAP)

- The National Social Assistance Programme(NSAP) which came into effect from 15th August,1995 represents a significant step towards the fulfillment of the Directive Principles in Article 41 of the Constitution.
- The programme introduced a National Policy for Social Assistance for the poor and aims at ensuring minimum national standard for social assistance in addition to the benefits that states are currently providing or might provide in future.
- NSAP at present, comprises of Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS), Indira Gandhi National Disability Pension Scheme (IGNDPS), National Family Benefit Scheme (NFBS) and Annapurna.

Saansad Adarsh Gram Yojana (SAANJHI)

- The Scheme was launched on 11th October, 2014 - Lok Nayak Jai Prakash Narayan Ji's birth anniversary – at Vigyan Bhawan, New Delhi.
- The goal is to develop three Adarsh Grams by March 2019, of which one would be achieved by

2016. Thereafter, five such Adarsh Grams (one per year) will be selected and developed by 2024.

- Inspired by the principles and values of Mahatma Gandhi, the Scheme places equal stress on nurturing values of national pride, patriotism, community spirit, self-confidence and on developing infrastructure.
- The SAANJHI will keep the soul of rural India alive while providing its people with quality access to basic amenities and opportunities to enable them to shape their own destiny.

Village Grain Bank Scheme:

I. This scheme was implemented by the department of food and public distribution.

II. Main objective of this scheme is to provide safeguard against the starvation during the period of natural calamity or during lean season when the marginalized food insecure households do not have sufficient resources to purchase rations.

III. Under this scheme needy people will be able to borrow food grains from the village grain bank and return it when they have abundant food.

National Rural Health Mission:

- **I.** The National Rural Health Mission (NRHM), now under National Health Mission is initiated on 12 April, 2005.
  II. Main aim of this plan is to provide accessible, affordable and accountable quality health services even to the poorest households in the remotest rural regions.
  III. Accredited social health activists (ASHA) scheme is also operational under this scheme.
  IV. It is run by the ministry of health and family welfare.

Aam Aadmi Bima Yojna:

I. It was launched on october2, 2007.

II. It's a social security scheme for rural households.

III. Under this scheme one member of the family is covered.

IV. The premium of Rs. 200 per person per annum is shared by the state and central government.

V. The insured person need not to pay any premium if his/her **age is between the 18 years to 59**years.

Kutir Jyoti Programme:

I. This programme was launched in 1988-89.

II. Its main motive was to improve the standard of living of schedule castes and schedule tribes including the rural families who live below the poverty line.

III. Under this programme, a government assistance of Rs. 400 is provided to the families who are living below the poverty line for single point electricity connections in their houses.

Sarva Siksha Abhiyan:

I. SSA has been operational since 2000-2001.

II. Its main aim is to make free and compulsory education to children between the ages of 6 to 14, a fundamental right.

III. This programme was pioneered by former Indian Prime Minister Atal Bihari Vajpayee.

IV. Right to education is related to the 86th Amendment 2002 to the Constitution of India.

V. Currently its expenditure is shared by the centre and state into 50: 50 ratios.

Rural Development Programmes

- Community Development Programme (CDP) - 1952.
- National Fund for Rural Development (NFRD) - 1984.
- Council for Advancement of People's Action & Rural Technology(CAPART) - 1986.
- Supply of Improved Toolkits to Rural Artisans (SITRA) - 1992.
- District Rural Development Programme (DRDP) - 1993.
- Jawahar Gram Samridhi Yojana - 1999.
- Pradhan Mantri Gram Sadak Yojana - PMGSY - 2000(link all villages with pucca roads)
- Bharat Nirman Programme - 2005.
- Twenty Point Programme - 1975.
- National Rural Drinking Water Programme (NRDWP) - 2009.
- Member of Parliament Local Area Development Programme (MPLAD) - 1993.

POPULATION

- Population refers to the total number of people residing in a country. Whether a big and growing population is an asset or a liability for the economy depends on the respective economic conditions of a country.
- It is an asset when it provides workforce to produce, market for the products and facilitates division of labour and innovation. However a big population becomes a liability when demand for food, infrastructure, health and other facilities exceed its supply.
- India's population in 1901 was 23.84 crores. After 100 years in 2001 it increased more than four times and stood at 102.27 crores.
- As per the census 2011, population stands at 121.02 crores. India has only about 2.4% of the world's area and less than 1.2% of the world's income but accommodates about 17.5% of the world's population. In other words every sixth person in the world is an Indian.

DEMOGRAPHY

- Demography is the statistics study of the size, density, territorial, distribution, composition growth and composition of population, change therein and the components of such changes.

Birth Rate and Death Rate:

- Birth rate refers to number of birth per thousand of population. Similarly death rate refers to number of deaths per thousand of population. Growth Rate = Birth Rate – Death Rate. In 2010 – 11, birth rate stood at 22.1 and death Rate. In 2010-11, birth rate stood at 22.1 and death rate 7.2.

Density of Population:

- This refers to the number of persons per square kilometre. In 1951 it was 117 and in 2001 it has gone upto 324. In 2011 it has further increased to 382. Density of population is not same for all the states.

Sex Ratio:

- This refers to the number of females per 1000 males.

- In 1951 it was 946 and in 2001 it has declined to 933. In 2011 it marginally improved and stood at 940.
- Only in Kerala and Pondicherry the sex ratio is favourable to females. It was 1,084 females in Kerala and 1038 females in Puducherry for 1000 males as per 2011 census.

Life Expectancy at Birth:

- This refers to the mean expectation of life at birth. Life expectancy has improved considerably over the years. In 1951 it was only 32.1 years. In 2001 it has gone up to 63.8 years. In 2011 it has gone up to 65.3 years.

Literacy Ratio:

- This refers to number of literates as a percentage of total population. This has gone up from mere 16.7% in 1951 to 65.38 in 2001.
- In 2011 literacy rate stood at 74.04%. Male literacy rate was 82.14% and female literacy rate was 65.46%. Kerala has the highest literacy rate. It was 93.91%.
- Literacy rate in Bihar is the lowest. It was 63.82%.

Urban-Rural Population:

- As per the 2011 census 31.16% population of the country is urban based while the 68.84% population is rural based.

Population Explosion

- Population explosion means the alarming and rapid rate of increase in population.

Causes Of Population Explosion

- Early Marriage
- Poverty
- low Standard of living
- Illiteracy
- social and religious reasons
- high birth rate
- low death rate

Population Explosion as an obstacle to Economic Development

- Food Shortage
- Burden of unproductive Consumers Reduction in National and Per Capita Income
- Low savings and investment
- Reduction in Capital Formation
- Unemployment and Underemployment
- Loss of Women's Labour
- Low Labour efficiency

- More Expenditure on Social Welfare Programmes
- Agricultural Backwardness
- Underdeveloped Industries
- Financial Burden on Government

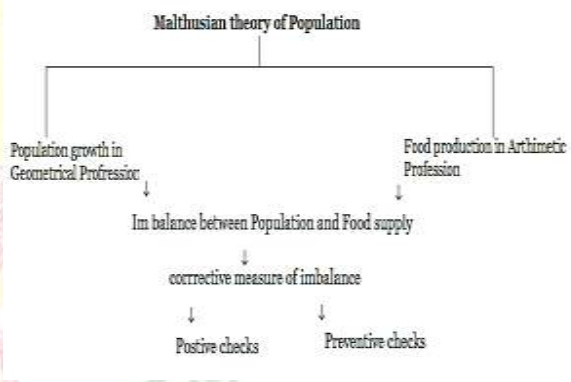
Theories of Population

1.) Malthusian Theory of Population

- First, the rate of growth of population is limited by the availability of the subsistence. food**.** If the subsistence increases, population also increases.

The first proposition

- States that the size of population is determined by the availability of food production.
- If food production does not increase to match the rate of growth of population, it will lead to poverty.
- If the food production increases, the people will tend to increase their family size. This will lead to more demand for food, so the availability of food per person will diminish. This will lead to a lower standard of living.
- Second, population increases at a faster rate than food production. In other words, while population increases in a geometric progression, food production increases in an arithmetic progression
- Third, the preventive and positive checks are the two measures to keep the population on the level with the available means of subsistence.



The second Proposition

- Population would increase at a geometrical progression i.e. in the ratio of 2, 4, 8, 16, 32, etc.,
- But food production would increase at an arithmetical progression i.e. in the order of 2, 4, 6, 8, 10, etc. The imbalance between the population growth and food supply would lead to a bare subsistence of living, misery and poverty.

The third proposition

- ❖ Imbalance is corrected by two checks namely preventive checks and positive checks.

1. Preventive checks are applied by man to reduce the population. It include late marriage, self-restraint and other similar measures applied by people to limit the family.
2. Positive checks affect population growth by increasing death rate. It includes Common diseases, plagues, wars, famines unwholesome occupations, excess labour, exposure to the seasons, extreme poverty, bad nursing of children are a few examples for positive checks,

11th July - World population day

The Theory of Optimum Population

- ❖ Modern economists such as Sidgwick, Cannon, Dalton and Robbins have propagated this theory.
- ❖ Optimum population means the ideal population relative to the natural resources, stock of capital equipment and state of technology
- ❖ In other *words,* optimum population is that level of population at which per capita output is the highest.
- ❖ A country is said to be under populated if the population is less than the optimum and overpopulated if the population is more than the optimum.

3. The following formula measures whether population at a point of time is optimum or not

$$M = \frac{A-O}{O}$$

Where,

M = Maladjustment in level of output

A = Actual population

O = Optimum population

- ❖ If M is zero, then the total population is equal to optimum population
- ❖ If M is positive, the total population is more than the optimum population.
- ❖ If M is negative, the total population is less than the optimum population

The Theory of Demographic Transition

- It was given by Frank W. Notestein
- The demographic transition brings out the relationship between fertility and motility, i.e. between the birth rate and the death rate.
- *Birth rate refers to the number of births occurring per 1000 in a year.*
- *Death rate refers to the number of deaths occurring per 1000 in a year.* This theory explains the changes in these rates as a consequence of economic development. This theory points out that there are three distinct stages of population growth.

Stage I: High Birth Rate and High Death Rate

- In the first stage, the country is backward and less developed.
- Agriculture will be the main occupation of the people. The standard of living of the people will be low.
- The high death rate is due to poor diets, improper sanitation and lack of proper medical facilities.
- Birth rate is high on account of widespread illiteracy, ignorance of family planning techniques, early marriages, social beliefs, customs and attitudes of the people.
- In this stage, the rate of growth of population is not high since high birth rate is offset by the high death rate and the population growth stagnates.

Stage II: High Birth Rate and Low Death Rate

- As a country advances, it might result in increase in industrial activity, creating more employment opportunities.
- This will raise the national and per capita income of the people, thereby increasing their standard of living.
- The advancement in science and technology will result in the availability of better medical facilities.
- The eradication of many epidemics and dangerous diseases and better sanitary conditions reduce the disease and death.
- The birth rate still remains high due to the resistance to change, and the long established customs and beliefs.

Stage III: Low Birth Rate and Death Rate

- ❖ Economic development leads to change in the structure of the economy from an agrarian to a partially industrialised.
- ❖ With the increase in industrialisation, people migrate from rural to urban areas, and there is a change in the attitude of the people.
- ❖ With the spread of education, people prefer small families in order to increase the standard of living. Thus the birth rate is reduced.
- ❖ Implementation of better medical facilities, control of disease and public sanitation result in low death rate.

Steps to check rapid growth of population

- ✓ Couple Protection Rate (CPR) should be increased
- ✓ Infant Mortality rate (IMR) should be reduced
- ✓ Industrialisation of the country
- ✓ Increase in Female Literacy Rate and Education
- ✓ Late Marriages must be encouraged
- ✓ Strict laws must be made and enforced to check early marriages and polygamy.
- ✓ Family Planning

Population Policy

- Father of India census L. Mayo
- First census was taken during 1872
- Census was taken once in 10 years
- Prime Minister was the head of the National Population committee.

- ❖ India was the first developing country to adopt a population policy and to launch a nationwide family planning programme in 1952.
- ❖ The main objective of the population policy is to ensure that there is reasonable gap between the fall of death and birth rates.
- ❖ Population policy refers to the efforts made by any Government to control and change the population structure.

Highest populated state in India – Uttar Pradesh

Demographic gap :

- ❖ It is the difference between the birth rate and death rate of population of a country.
- ❖ Demographic dividend. It refers to an opportunity before a country with a high share of population between the ages of 15 and 64 to boost economic growth. Population pyramid it is a graphical illustration of the different age group in a population along with the male and female population.

Population Trend in India

- ❖ 1891 – 1921 Period of Stagnant population
- ❖ 1921 – 1951 Period of steady growth
- ❖ 1951 – 1981 Period of rapid declining rate
- ❖ 1981 – 2011 Period of slow declining rate
- ❖ The year 1921 is known as the Year of Great Divide.

National Population Policy – 2000.

- ❖ With a view to encourage two-child norm and stabilizing population by 2046 A.D. the Government adopted the National Population Policy (NPP-2000). The following are the main feature of the NPP.

1. Address the unmet needs for basic reproductive and child health service, supplies and infrastructure.
2. Make school education up to age 14 which is free and compulsory, and reduce dropouts at primary and secondary school levels to below 20 percent for both boys and girls.
3. Reduce infant mortality rate below 30 per 1000 live births.
4. Reduce maternal mortality ratio to below 100 per 100,000 live births.
5. Achieve universal immunization of children against all preventable diseases.
6. Promote delayed marriage for girls, not earlier than age 18 and preferably after 20 years of age.
7. Achieve 80 per cent institutional deliveries and 100 percent deliveries by trained persons.
8. Achieve universal access to information / counselling, and services for fertility

regularization and contraception with a wide basket of choices.

9. Achieve 100 percent registration of births, deaths, marriage and pregnancy.
10. Prevent and control communicable diseases.
11. Integrate Indian System of Medicine (ISM) in the provision of reproductive and child health services and in reaching out to households.
12. Promote vigorously the small family norms to achieve replacement levels of TFR.

The National Commission on Population

- The National Commission on Population was constituted on May 11, 2000 under the Chairmanship of the Prime Minister to provide overall guidance for population stabilization by promoting synergy between demographic, educational, environmental and developmental programmes.
- On May 19, 2005 the National Commission on Population was reconstituted. This commission has now been transferred from Planning Commission to Ministry of Health.

Highest population density Bihar

Population Census 2011 (At a Glance)

Total Population of the Country (Census 2011)	**121.02 core**
Percentage of World Population (2011)	17.5 percent
Total Urban Population (2011)	37.7 core
Sex Ratio (2011)	940
Child Sex Ratio (2011) (Female child / 1000 male children)	913
State with highest Female – Male Ratio (2011)	Kerala (1084)
Birth rate (2010)	22.1 per thousand population
Death rate (2010)	7.2 per thousand population
Infant Mortality Rate (2010)	47 per thousand

Rural Urban	51 31
Life Expectancy (At the time of birth)	63.5 years
Male (2002-06)	62.6 years
Female (2002 – 06)	64.2 years
Literacy Rate (2011) Male Female	74.4 percent 82.14 percent 65.46 percent
State with Highest Literacy (2011)	Kerala (93.91%)
State with Lowest Literacy (2011)	Bihar (63.82%)

Highlights of 2011 census

- The population of India 1210.2 million is almost equal to the combined population of USA, Indonesia, Brazil, Pakistan, Bangladesh and Japan
- The population has grown by more than 191 million during the decade 2001-2011.
- 2001-2011 is the first decade (with the exception of 1911-1921) which has added lesser population compared to the previous decade.
- Overall sex ratio at the national level has increased by 7 points since Census 2011 to reach 940.
- Dependency ratio (children below 15 and elderly above 64) – ratio of children and elderly to those in the working age has shrunk from 0.6 to 0.55.

TERMS YOU SHOULD KNOW

Aadhar

- *Aadhar is a 12-digit unique number, which the Unique Identification Authority of India (UIDAI) will issue to residents of India on a voluntary basis. The number will be generated randomly and will not be based on any classification. The number will be linked to the basic biometric information of the person, including photograph, iris and fingerprints.*
- *Aadhar is meant to provide a unique identity to individuals and eliminating the duplicate and fake identities existing in government* records. It will help the government in better targeting its services and benefits based on their needs.

India is currently in 3rd stage (low Birth rate and death Rate)

UIDAI (Unique Identification Authority of India)

UIDAI is an office under the planning Commission of India, which was set up in January, 2009, to issue unique identify numbers to people in the country and own and operate the Aadhar number database on an on-going basis. The agency will issue only the number and not the smart cards. The agency is headed by a chairman, who holds a cabinet rank. The first and current Chairman of UIDAI is Nandan Nilekani, former Co-chairman of Infosys Technologies. The Government plans to give statutory status to UIDAI through the National Identification Authority of India Bill, 2010, which is yet to be passed by Parliament

1st Aadhar card given in – September 29th, 2010.

Poverty and Unemployment

- The Copenhagen Declaration 1995 at the "World Summit on Social Development" describes poverty as "a condition characterized by severe deprivation of basic human needs such as food, shelter, safe drinking water, sanitation, health, education, and information".
- The World Bank(1990) has defined Poverty as the inability to attain a minimal standard of living.
- The UN Human Rights Council has defined poverty as, "a human condition characterized by the sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights".
- In the words of Dandekar (1981) "w*ant of adequate income, howsoever defined is poverty*" Thus, lack of adequate income to buy the basic goods for subsistence living is an important element in the definitions of poverty.
- It is a social phenomenon in which a section of the society was unable to satisfy its basic minimum needs.

Types of Poverty :

1. **Absolute Poverty**
   - ✓ It refers to a condition where a person does not have the minimum amount of income needed, to meet the minimum requirements for basic needs as per national standards.
2. **Relative Poverty :**
   - ✓ It is an extreme form of inequality.
   - ✓ It depends on the standards being applied and implies that within a particular society a given standard of living is unacceptably low.
   - ✓ Relative Poverty measure is used to calculate inequality in the society.
   - ✓ It refers to poverty on the basis of comparison of per capita income of different countries.
3. **Temporary or Chronic Poverty**
   - ✓ In countries like India, when there is poor rainfall, the crops fail and the farmers temporarily enter into a poverty sample.

- ✓ But when they are poor for long, then we call it chronic or structural poverty.

4. Primary and Secondary Poverty

- ✓ Rowntree (1901) made a distinction between primary poverty and secondary poverty.
- ✓ Primary poverty refers to "families whose total earnings are insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency". "
- ✓ Secondary poverty refers to a condition in which earnings would be sufficient for the maintenance for merely physical efficiency were it not that some portion of it is absorbed by other expenditure, either useful or wasteful such as drink, gambling and inefficient housekeeping."

Extent of Poverty in India:

The extent of poverty in a country depend mainly on two factors:

1. The average level of national income.
2. The degree of inequality in its distribution.

Measures of Poverty

Poverty Line :

- ✓ Poverty line is the line, which indicates the level of purchasing power required to satisfy the minimum needs of a person.
- ✓ This lines divides the population in two groups, one of those who have this purchasing power or more and the other groups of those people, who do not have this much of purchasing powers.
- ✓ The former group is regarded as livings above the poverty line (APL). Those people are not regarded as poor.
- ✓ The latter group is considered as living below the poverty line these people are called poor.

Multi - Dimensional poverty Index (MPI)

- ❖ It was developed in 2010, by Oxford Poverty and Human Development initiative and the United Nations Development Programme.
- ❖ It uses different factors to determine poverty beyond income - based lists. It uses a range of deprivations that affect an individual's life.

- This measure assesses the nature and intensity of poverty at the individual level in education, health outcomes and standard of living. The MPI is calculated as follows
- MPI = H x A
- Where, H = Percentage of people, who are MPI poor (incidence of poverty)
- A = Average intensity of MPI poverty across the poor (%)

Human Poverty Index (HPI)

- Earlier UNDP set HPI as parameter to measure poverty in its Human Development Reports but 2010 onwards it switched over to a new parameter, namely - Multidimensional Poverty Index (MPI)
- The measures assesses the nature and intensity of poverty at the individual level in education. Health outcomes and standards of living.

Poverty Gap Index (PGI)

- It is the difference between the poverty line and the average income of households living below poverty Line (BPL), expressed as a percentage of poverty line.
- It indicates the depth and severity of poverty.

$$PGI = \frac{\text{Poverty Line - Average Income of BPL}}{\text{Poverty Line}}$$

Squared poverty Gap Index

- It is the mean of the squared individual poverty gaps relative to the poverty line.
- It indicates the severity of poverty as well as the inequality among the poor.

Causes of Rural Poverty :

- ✓ Rapid Population Growth,
- ✓ Lack of alternate employment opportunities other than agriculture,
- ✓ Illiteracy,
- ✓ Regional Disparities,
- ✓ Child Marriage,
- ✓ Joint Family System,
- ✓ Lack of proper implementation of Public Distribution System (PDS).

Causes of Urban Poverty :

- ✓ Migration from rural areas,
- ✓ Lack of skilled labour,
- ✓ Lack of housing facilities,

- ✓ Lack of vocational education and training,
- ✓ Less job opportunities in cities.

Poverty Alleviation through five year plans:

- ❖ These plans aim to set up a socialistic pattern of society based on equality and justice.

1. The First Five Year Plan(1951-56) was agriculture oriented to solve the food problems.
2. The Fourth Five Year Plan(1969-74) aimed to reduce the price level.
3. The Fifth Five Year Plan (1974-79) took measures for raising the purchasing capacity of the people living below the poverty line.
4. The Seventh (1980-85) aimed to remove poverty and to attain self sufficiency in food production.
5. Tenth Five Year Plan(1997-2002) was introduced to double the per capita income of Indians.

Estimation of Poverty in India :

1. Mr.V.M.Dandekar and Mr.Nilkanda Rath :

- ❖ They estimated the value of diet with 2250 calories as the desired level of nutrition.
- ❖ Using this cut-off, they stated that about 177 million people were poor in 1960-61 and about 216 million in 1968-69.

3. Montek Singh Ahluwalia's Study of Rural Poverty(1977)

- ❖ He studied the trends in incidence of rural poverty in India for the period 1956-57 to 1973-74.
- ❖ He used the concept of poverty line, i.e., an expenditure level of 15 in rural areas in 1960-61 and 20 per person for urban areas.

4. Estimate of Poverty by Seventh Finance Commission(1978):

- ❖ 7th FC made an attempt to have a more inclusive concept of poverty line. (the augmented poverty line.)
- ❖ Alagh Committee (1977)
- ❖ Chairman : YK Alagh.
- ❖ Submitted its report in 1979.

<u>On the basis of nutritional requirements.</u>

Area	*Calories*	*Minimum consumption expenditure (Rs per capita per month)*
Rural	2400	49.1
Urban	2100	56.7

5. Planning Commission Expert Group Report (1989):

- Chairman : D.T.Lakdawala**.**
- The expert group submitted its report in 1993.
- Per capita daily intake requirement was fixed as 2400 calories for Rural and 2100 calories for Urban.
- NSSO's 55th round (1999), Planning Commission gives two poverty estimates based on Mixed Recall Period(MRP) and Uniform Recall Period (URP) :

Calculation of Poverty:

1) Mixed Recall Period(MRP) :

- It involves the estimation of poverty using consumer expenditure data of 365 days recall period, for five infrequently purchased non-food items such as

- ✓ Clothing,
- ✓ Foot wear,
- ✓ Durable goods,
- ✓ Education,
- ✓ Institutional medical expenses and

- 30 day recall period for the remaining items.

2) Uniform Recall Period :

- The consumption data for all items are collected for a 30 days recall period.

6. Tendulkar committee on Poverty : (2005)

- Submitted its report in 2009.
- The Tendulkar panel stipulated a benchmark daily per capita expenditure of Rs. 27.2 in rural and Rs. 33.3 in urban areas.
- poverty ratio is21.9 %(2011-12) ie.269.8 million people.

7. Rangarajan Committee (2012):

- Submitted its report in 2014.
- Rangarajan committee raised the daily per capita expenditure

limits to Rs. 32.4 in rural and Rs. 46.9 in urban areas.

- poverty ratio is 29.5%(2011-12)ie.361 million people

Nature of poverty in india :

According to Rangarajan Committee (2011-12) ,

- State having maximum rural and urban poverty - Odisha.
- State having minimum rural and urban poverty - Mizoram (Overall Delhi).
- According to world bank report (2015) State having the highest MPCE (*Monthly Per Capita Consumption Expenditure*) Kerala.
- State having the lowest MPCE (rural) Kerala
- State having the lowest MPCE(urban) Haryana

Committee on urban Slum Statistics (2010)- Pranab Sen

- Projected slum population in the country for the year 2011 at 93.06 million
- It has defined a slum as "a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions".

Recent effort by Government:

- In 2014, the NDA Government has constituted a 14-member task force under Arvind Panagariya to come out with recommendations for a realistic poverty line.

First United Nations Decade for the Eradication of Poverty (1997-2006)

Committees related to poverty :

- *SR Hashim Committee report on Urbanpoor (2010- 2012) stated that roughly 35 per cent of urban Indian households live below poverty line (BPL). The highest fraction of Urban Poors are in Manipur . On the other hand, least proportion of Urban poor in India are in Goa.*
- *Dr. N.C. Saxena Committee on rural poor(2009) mentioned that the percentage of people entitled to BPL status should be revised upwards to at least 50%. C.Subramaniam former union Agricultural Minister headed the panel to U.N.O. to fight poverty and hunger in developing countries in the early 1970s'*

Poverty alleviation programmes

- The problem of poverty eradication is one of providing employment and raising the productivity of low level of employment. The following measures have been taken by the government to remove poverty from the country.

1. Land Reforms

- Land reforms legislation has been passed by the state governments, which aim at improving the economic conditions of agricultural landless labourers.
- Every state has passed the necessary legislation fixing ceiling on agricultural holdings by which the maximum amount of land which a person can hold has been fixed by law.
- The surplus lands thus acquired were to be distributed to the landless labourers and small peasants.

National Social Assistance Programme (NSAP)

- It was launched on August 15, 1995 to provide social assistance benefits to poor households affected by old age, death of primary bread winner or need for maternity care.

8. IRDP: Integrated Rural Development Programme 1980

- All round development of the rural poor through a programme of asset endowment for self-employment

PMGY: Pradhan Mantri Gramodya Yojana 2000

- Focus on village level development in 5 critical areas. i.e. primary health, primary education, housing, rural roads and drinking water and nutrition with the overall objective of improving the quality of life of people in rural areas.

- **Annapurna Scheme**
  - 2000
  - To ensure food security for all, create a hunger free India in the next five serve the poorest of the poor in rural and urban areas.

- **Food for Work Programme**
  - 2001
  - To give food security for all, create a hunger free India in the next five years, the poorest of the poor in rural and urban areas.
- **RAY: Rajeev Awaas Yojana**
  - 2010
  - To make India slum free in next 5 years
- **Nirmal Bharat Programme**
  - 2012
  - To eradicate the practice of open defecation by 2020
- **Direct Benefit Transfer**
  - 2013
  - Anti-Poverty programme, aimed to transfer subsidies directly to the bank accounts of people living below poverty line.
- **CDP : Community Development Programme**
  - 1952
  - Overall development of rural areas with peoples participation
- **NFRD: National Fund for Rural Development**
  - 1984
  - To grant 100% tax rebate to donors
- **CAPART: Council for Advancement of People's Actions and Rural Technology**
  - 1986
  - To provide assistance for rural prosperity
- **DRDA: District Rural Development Agency**
  - 1993
  - To provide financial assistance for rural development
- **PMGSY: Pradhan Mantri Gram Sadak Yojana**
  - 2000
  - To line all villages with pakka road
- **Bharat Nirman Programme**
  - 2005
  - Development of rural infrastructure including six components: irrigation, water supply, housing, road, telephone and electricity.

- **IAY: Indira Awaas Yojana**
  - 1999
  - To help construction of new dwelling units as well as conversion of unserviceable kutcha houses into pucca/semi-pucca by members of SC/STs rural poor below the grant-in-aid.

- **Twenty Point Programme**
  - 1975
  - Poverty eradication and raising the standard of living

- **DPAP: Drought Prone Area Programme**
  - 1973-74
  - To minimize the adverse effects of drought on production of crops and livestock and productivity of land, water and human resources, ultimately leading to drought proofing of the affected areas.

- **NRDWP: National Rural Drinking Water Programme**
  - 1st April 2009
  - Aims to move forward from achieving habitation level coverage towards household level coverage drinking water coverage through resorting to multiple sources like ground water, surface water etc.

- **TSC: Total Sanitation Campaign**
  - 1st April 1999
  - It follows a community led and people-centred approach and places emphasis on Information, Communication and Education (ICE) for demand generation of sanitation facilities.

- **NGP: Nirmal Gram Puraskar**
  - October, 2003
  - It is an incentive scheme to encourage PRIs to take up sanitation promotion.

- **DDP: Desert Development Programme**
  - 1977-78
  - To mitigate the adverse effects of desertification

- **IWDP: Integrated Wasteland Development Programme**
  - 1989-90
  - For the development of wasteland and degraded lands.

- **VAMBAY: Valmiki Ambedkar Awaas Yojana**
  - December 2001
  - Facilitates construction and up gradation of dwelling units for slum dwellers.

- **JNNURM: Jawaharlal Nehru National Urban Renewal Mission**
  - 3rd December 2005
  - To assist cities and towns in taking up housing and infrastructural facilities for the urban poor in 63 cities (now 65 cities in the country)

- **MPLADS:**
  - 1993
  - It provides 12 crores to each MP to undertake development activities in their respective constituency. It was raised to 15 crore from 2011.

- **AHIP: Affordable Housing in Partnership**
  - 2009
  - Aims at constructing one million houses for the EWS/LIG/MIG with at least 25% for EWS category. It seeks to operationalize National Habitat Policy, 2007.

1. Full Employment :

- Full employment refers to a situation in which all the workers who are capable of working and willing to work get an employment at reasonable wages.
- It does not imply that all adults have jobs.
- A person is considered employed if he /she works for 273 days of a year for 8 hours every day.

2. Unemployment :

- It refers to a situation, when a person is able and willing to work for the prevailing wage but does not get the opportunity to work.
- Labour force includes all people in the working age group (15 to 59 yrs) who are able and willing to work.
- Number of unemployed = Labour force – Work force(employed)

Unemployment rate :

- ❖ It is the percent of the labour force that is without work.
- ❖ Unemployment rate = (no of unemployed individuals/labour force) x 100

1. Estimation of Employment and Unemployment :

- ❖ *B Bhagwathi committee* on unemployment (1973) gave 3 estimates of unemployment.

Measures of unemployment in India

1. **Chronic** or **Usual Principal Status unemployment (UPS)**
   - ❖ It is measured as number of persons who remained unemployed for a major part of the year.
   - ❖ This is also referred to as 'open unemployment'.
   - ❖ Here the reference period is one year. (over 182 days)

Weekly Status unemployment: **(CWS)**

- ❖ It refers to the number of persons who did not find even an hour of work during the survey week.
- ❖ Here the reference period is one week.
- ❖ It also measures chronic unemployment.

The unemployment rate at all India level stood at 3.8 per cent while in rural and urban areas it was 3.4 per cent and 5 per cent

Daily Status unemployment (CDS):

- ❖ It refers to the number of persons who did not find work on a day or some days during the survey week.
- ❖ Here the reference period is one week.
- ❖ Includes chronic unemployment as well as under employment.

2. Key Indicators for the estimation of Under Employment in India

- ❖ Labour Force Participation Rate (LFPR)

$$\frac{Number\ of\ employed\ persons + Number\ of\ unemployed\ persons}{Total\ Population}$$

- ❖ Worker Population Ratio (WPR) $= \frac{Number\ of\ employed\ persons}{Total\ Population} \text{x1000}$
- ❖ Population Unemployed (PU) = $\frac{Number\ of\ employed\ persons}{Total\ Population} \text{x1000}$
- ❖ Unemployed Rate (UR) = $\frac{Number\ of\ unemployed\ persons}{Number\ of\ employed\ Persons + Number\ of\ unemployed\ persons} X1000$

3. Types of Unemployment :

Voluntary Unemployment :

- This type of unemployment is on account of persons not interested to take the employment ie: jobs are available but the persons are not interested in being employed.

Involuntary Unemployment :

- It refers to a situation in which the persons are interested to work but the jobs are not available. Under this category there are various categories of unemployment. They are

1) Structural Unemployment :

- Caused by structural changes like rapidly growing population; fall in the rate of capital formation; technological change etc.. in the economy. It is of long run nature.

2) Frictional Unemployment :

- It occurs when people change from one job to another and remain unemployed during this interval period. This type is short in nature.

3) Cyclical Unemployment :

- It refers to a situation where people are thrown out of job due to recession in the economy.

John Maynard Keynes coined the term technological unemployment

- Also called Demand Deficiency Unemployment or Keynesian economy
- The root cause of this type is lack of aggregate demand.

4) Disguised Unemployment :

- Here people are apparently employed but their marginal productivity is zero(contribution to production is nil).Mostly prevalent in agriculture.
- If a part of the labour force is withdrawn and the total productivity remains unchanged, this withdrawn labour will be known as disguised unemployed labour.
- It is also known as concealed unemployment.

5) Seasonal unemployment :

- It is the *unemployment* created from *seasonal* variations in demand for goods and services.
- In an economy there will be certain times of year when the

demand for goods and services are lower than normal.

- Most prevalent in agro based industries.

6) Technological unemployment

- It is a term used to describe the lack or loss of jobs due to technological changes or innovations.
- Technology has always displaced some manual works.

7) Open unemployment

- Refers to a situation where large labour force does not get jobs that may yield them regular income.

8) Under employment :

- It can be defined in two different ways
- A situation in which a person does not get the type of work he is capable of doing due to lack of suitable jobs.
- A Situation in which a person does not get sufficient work to absorb him for the total length of the working hours a day. This type of unemployment is known as seasonal unemployment.

Rural and Urban Unemployment in India :

- To sum up rural unemployment in India is characterized by the existence of under employment, seasonal unemployment and disguised unemployment.
- Whereas urban unemployment is characterized by the existence of both industrial and educated unemployment.

Industrial Unemployment:

- It refers to unemployment among worker due to developments in technology in industries.
- It is an open unemployment.

Educated unemployment:

- It constitutes large part of urban unemployment in India.
- If a person fails to obtain a suitable job suited to his qualification, he is said to be educated unemployed.

Natural unemployment

- Unemployment ranging between 2 to 3%in the country is considered natural and inevitable.

- This minimal percentage cannot be eliminated at all.

4. Causes of Unemployment:

- Rapid Population Growth,
- Seasonal Employment,
- Joint Family System,
- Increasing turnout of students from Indian universities,
- Insufficient rate of economic progress,
- Slow developing of Industries.

Unemployment and five year plan

- Almost all the Five Year Plans aim for the increase of employment opportunities.
- The Second Five Year Plan(1956-1961) expanded employment opportunities in India by creating 10 million new jobs.
- The Tenth Five Year Plan(2002-07) aimed for 10 million employment opportunities per year.

5. Measures to Solve Unemployment Problem in India

- A Change in the pattern of investment.
- Encouragement to small enterprises as against big enterprises.
- Encouragement of New Growth Centres in Small Towns and Rural Areas.
- Subsidies on the Basis of Employment.
- Reorientation of Educational Policy.
- Emphasis should be given to vocational and technical education.
- Scientific method should be adopted in cultivation

Dantewala Committee *on Unemployment Estimates set up by the Planning Commission in 1969 (N.S.S.O.) has developed and standardized the concepts and definitions of labour force, employment and unemployment suitable to our socio-economic conditions and adopted them in quinquennial surveys on employment and unemployment since 1972-73 (27th Round).*

6. Employment related schemes

- **TRYSEM: Training Rural Youth for Self-Employment**
  - 1979
  - Programme for training rural youth self-employment
- **NREP: National Rural Employment Programme**
  - 1980
  - To provide profitable employment opportunities to the rural poor
- **RLEGP: Rural Landless Employment Guarantee Programme**
  - 1983
  - For Providing employment to landless farmers and labourers

Article 41(DPSP) - Right to work, to education and to public assistance in certain cases(removal of untouchability is the responsibility of the state)

- **SUWE: Scheme of Urban Waged Employment**
  - 1990
  - To provide waged employment after arranging the basic facilities for poor people in the urban areas, where population is less than 1 lakh.
- **EAS: Employment Assurance Scheme**
  - 1993
  - To provide employment of a least 100 days in a year in village
- **SJSRY: Swarana Jayanti Shahari Rozgar Yojana**
  - 1997
  - To provide gainful employment to urban unemployed and under employed poor through self-employment or wage employment.
  - This scheme has five components
  - Urban Self-Employment Programme (USEP)
  - Skill Training for Employment Promotion amongst Urban Poor (STEP-UP)
  - Urban Wage Employment Programme (UWEP)
  - Urban Community Development Network (UCDN)
- **SJGSY: Swarana Jayanti Gram Swarozgar Yojana**
  - 1999 1st April
  - For elimination rural poverty and unemployment and promoting self-employment through establishing micro enterprises in rural areas.
  - Targets to cover 50% SCs/STs. 40% women, 15% minorities and 3% disabled.
- **JPNRGY : Jai Prakash Narayan Rozgar Guarantee Yojana**
  - Proposed in 2002 – 03 Budget
  - Employment guarantee is must in poor districts.
- **MGNREGA: Mahatma Gandhi National Rural Employment Guarantee Scheme**
  - 2nd February 2006
  - It aims at enhancing livelihood security of households in rural areas of the country by providing at least 100 days of guaranteed wage employment in a financial year to every household, whose adult members volunteer to do unskilled manual work.
  - It also mandates 33 % participation for women. The primary objective of the scheme is to augment wage employment.
- **PMEGP: Prime Minister's Employment Generation Programme**
  - 2008
  - To generate employment opportunities in rural as well as urban areas through setting up of self-employment ventures/projects/micro enterprises.

National Sample Survey Organization:

- NSSO is the organization under the Ministry of Statistics of the Government of India.
- It conducts regular socio-economic surveys.
- It was established in 1950.

Overall Unemployment Rate in 2017-18 is 3.4 percent

Nature of unemployment in India

- According to Annual employment and unemployment survey report 2013-14, on the basis of usual principal status :

The number of female workers in India is 149.8 million (2011 census)

Aggregate unemployment rate	4.7%
Unemployment rate in rural areas	4.9%
Unemployment rate in urban areas	5.5%
State having maximum unemployed people	Sikkim
State having the least unemployed people	Chattisgarh
State having maximum unemployment rate	Kerala

HUMAN RESOURCES DEVELOPMENT

Economic Growth and Human Resource Development

Economic Development:

- It is defined as the process of increasing the degree of utilization and improving the productivity of the available resources of a country which leads to an increase of the economic welfare of the community by stimulating the growth of National Income.
- Economic Development = Size of Economic Output +Welfare (A qualitative aspect)

  Or

ED = Social Change + Economic growth

Economic Growth :

- Economic growth has been defined as an increase in real terms of the output of goods and services that is sustained over a long period of time, measured in terms of value added.
- Economic Growth = Size of Output (A quantitative aspect)
- Economic growth has been defined by Arthur Lewis as "the growth of output per head of population".
- In other words, economic growth refers to an increase in per capita national income..
- According to Arthur Lewis, economic growth is conditioned by
  1. Economic activity,
  2. Increasing knowledge and
  3. Increasing capital.

Rostow's Stages of Economic Growth

- W.W. Rostow, American economic historian described the transformation of countries from underdevelopment to development in terms of stages of growth. The following stages are:-
  - ✓ The Traditional Society – It is custom-bound and tradition-oriented, the poor countries are good example
  - ✓ The Transitional Society - In the transitional society, the force of customs and traditions will become less, there will be

economic motivation, and there will be improvements in physical and social infrastructure

- ✓ The take- off stage – It refers to a situation where an economy transforms itself from a predominantly agricultural to a predominantly industrial society
- ✓ The mature stage - In this stage, the government has to make some basic decisions. As there will be abundant resources and goods, whether it has to use them for strengthening the nation into a strong and powerful state militarily or to use the resources for improving the welfare of the people.
- ✓ The age of high mass consumption - The final stage is the age of high mass consumption. During this period, people will consume all kinds of goods especially durable goods like cars on a mass scale.

Human Resource Development :

- ❖ HRD is defined as "organized learning activities arranged within an organization in order to improve performance and / or personal growth for the purpose of improving the job, the individual and/or organization".
- ❖ The term "Human Resource" refers to total knowledge, skills, creative abilities, talents, aptitudes as well as population of a country. Adam Smith included the acquired and useful abilities of human beings in his analysis of capital as Human Resources.

Human Resource Management (HRM):

- ❖ Human resource management is that part of the Management process which involves the ways in which people develop their skills
- ❖ Human: refer to the skilled workforce in the organisation. Resource: refer to limited availability or scarce.
- ❖ Management: refer to maximise or proper utilisation and make best use of limited and a scarce resource.
- ❖ HRM aims at developing personal qualities in an individual so that he or she may contribute in a healthier manner for the national and world peace.

Human Capital :

- ❖ Human capital consists of knowledge and skills acquired by individuals. It may be acquired in a

formal way through education or employers training programmes.

- Investing in human capital makes people more productive and can increase their earnings, provided there is demand for the particular skill and knowledge.
- Human capital is an important element in the process of economic growth. Investment in education, training, healthcare etc. is called human capital formation.
- The most important indicators of HRD can be generally classified into (1) those which measure a country's stock of human capital, and (2) those which measure the additions to this stock. This is the rate of human capital formation over a specified period. The stock of human capital indicates the level of HRD in a country, whereas the rate of human capital formation indicates its rate of improvement.
- Based on the composite index of HRD, they classified countries into
  1) under-developed
  2) Partially developed
  3) semi- advanced
  4) advanced.

HRD and Economic Development

- There is a close relationship between the indicators of HRD and indicators of economic development.
- The level of economic development can be studied by making use of the following indicators :
  1. Gross National Product (GNP) per capita in United States dollars.
  2. Percentage of the active population engaged in agricultural occupation.
  3. Public expenditures on education as a percentage of national income, and the percentage of the total population in the age group five to fourteen inclusive.

Human Development Report :

- The Human Development report was published by the UNDP since 1990 captures the initiator was Pakistan economist Mahbub – ul –haq and indian economist Amartya sen.
- The hence of the HDR 2014 is the sustaining Human progress reducing vulnerabilities and building resilience.

Theme for 2017 - Education for all & Quality Education

- HDR calculation was based on 3 variables
  1. Life expectancy at birth
  2. Literacy (mean year of schooling and expected years of schooling)
  3. Standard of living (GNI per capita (PPIS))

HDI Valuation

- On the basis of HDI valuation, countries are classified into three categories with valuation scale running between 0 and 1.
  1. High - 0.8 and above
  2. Medium - 0.5 to 0.8
  3. Low - Less than 0.5
- Out of total 177 countries, 55 are in High group, 86 in Medium group and 36 in the Low group. India is placed in the Medium group.

The three parameters are as given below:

- High Human Development Countries: 0.800–1.000 points on the index.
- Medium Human Development Countries: 0.500–0.799 points on the index.
- Low Human Development Countries: 0.000–0.499 points on the index.

Gender inequity Index – 124
India ranks of 159 countries in Human Development Index - 130

Gender Related Development Index :

- GDI adjusts the HDI to reflect the inequalities between men and women.
- The three measures used are related to
  1. Female life expectancy,
  2. Female adult literacy and gross enrolment ratio and
  3. Female per capita income.

Gross National Happiness :

- The term gross national happiness was coined in 1972 by the then Bhutan king Jigme sing ye wangchuck.
- It was designed in an attempt to defined an indicator that measures quality of life or social progress in more hysteretic and psychological terms than the economic indicator of GDP.
- Without rejecting the idea of human development propounded by the UNDP, the kingdom has

been officially following the targets set by the GNH.

- Bhutan has been following up the GNH since 1972 which has the following parameters to attain happiness/development:
  a. Higher real per capita income.
  b. Good Governance.
  c. Environmental Protection.
  d. Cultural Promotion.

Inequality adjusted HDI :

- It adjusts the HDI for inequality in distribution of the dimensions - life expectancy, years of schooling and household income or consumption.
- Adjusted means the inequality in each dimension is discounted from the average level of achievement in each dimension.
- If HDI and IHDI are equal, it means there is no inequality.
- If IHDI is less than HDI, it means there is inequality and vice versa.

Gender inequality index :

- It measures inequality that exists between men and women across three dimensions viz, reproductive health, empowerment and the labour market.
- The indicators for reproductive health are Maternal Mortality Rate and Adolescent Fertility Rate.
- The indicators for Empowerment are parliamentary representation and attainment of secondary and higher education. Labour market indicator is labour market participation.
- GII ranges from 0 to 1.
- Zero represents fair equality and one represents very poor equality.

Global Hunger Index :

- It is based on the three indicators :
  1. Proportion of the population that is undernourished.
  2. The proportion of children who are underweight and
  3. Under five Chid Mortality.

Human Sustainable Development Index :

- It measures overall quality of life. It includes 4th parameter "per capita carbon emission" to the existing three HDI.

Physical Quality Life Index (PQLI):

- It was developed by D Morris.
- It is the average of three values.
  1. Life Expectancy
  2. Basic literacy rate

3. Infant Mortality rate.

- Each value was scaled on 1 to 100, where 1 represented the 'worst' and 100 represented the best.

Misery Index :

- Created by Arthur Okun.
- It is found by adding the unemployment rate to the inflation rate.
- It is assumed that both a higher rate of unemployment and worsening of Inflation create economic and social costs for a country.

Economic Development Index (EDI):

- EDI was developed by National Council of Applied Economic Research (NCAER). It is based on three components :

1. Health attainment index,
2. Education attainment index,
3. Per capita GDP.

Gini Coefficient :

- An inequality indicator in an economy.
- The coefficient varies from 'zero' to 'one'.
- A 'zero' Gini coefficient indicates a situation of perfect equality (i.e. every household earning the same level of income) while a 'one' signifies a situation of absolute inequality (i.e. a single household earning the entire income in an economy).

Lorentz Curve :

- A graph showing the degree of inequality in income and wealth in a given population or an economy.
- It is a rigorous way to measure income inequality. In this method (for example), personal incomes in an economy are arranged in increasing order; the cumulative share of total income is then plotted against the cumulative share of the population.
- The curve's slope is thus proportional to per capita income at each point of the population distribution.
- In the case of complete equality of income, the Lorenz curve will be a straight line and with greater curvature the inequality rises proportionally–the Gini Coefficient measures this inequality.

India 108 in gender gap index

SUSTAINABLE ECONOMIC GROWTH

Sustainable Development Goals (SDGs)

The **Sustainable Development Goals** (**SDGs**), are officially known as Transforming our world: the 2030 Agenda for Sustainable Development. There are 17 Sustainable Development Goals, associated 169 targets and 304 indicators. This included the following goals:

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all

8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduce inequality within and among countries

11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

Measurement of Sustainable Development

The measurement of sustainable development is done in terms of two different aggregates

Green Net National Income

It is the difference between Net National Income and Depreciation of Natural Capital. Net National Income is the market value of the final goods and services produced by the residents of the country during the period of one year. Depreciation of Natural Capital means loss of value of the capital because of its continuous use. Natural capital refers to the sum total of natural resources including environment.

Green Net National Income = Net National Income – Depletion of Natural Resources – Environmental Degradation.

Sustainable development is to be measured in terms of the rise in Green National Income.

Genuine Savings

The genuine savings are the rate of savings adjusted not only for depreciation of man-made capital but also for loss of value of the natural capital.

Genuine Savings = Gross Savings – Depreciation of Manmade Capital – Depreciation of Natural Capital

(Depletion of Natural Resources and Degradation of Environment).

Increase in Genuine Savings implies higher rate of sustainable development and vice versa.

Millennium Development Goals(MDGs) vs Sustainable Development Goals(SDGs)

As the MDG deadline approaches, about 100 crore people still live on less than $1.25 a day – the World Bank measure on poverty. More than 80 crore people do not have enough food to eat. Now let's have a quick look on why we need SDGs.

- MDGs were too narrow.
- MDGs failed to consider the root causes of poverty.
- The millennium development goals made no mention of human rights.
- In reality MDGs were considered targets for poor countries to achieve from the finance of wealthy countries.
- Every country will be expected to work towards achieving the SDGs.
- Goal 16 has a target to promote the rule of law and equal access to justice.
- MDGs were drawn up by a group of men in the basement of UN headquarters.
- Establishing post-2015 goals was an outcome of the Rio+20 summit in 2012, which mandated the creation of an open working group to come up with a draft agenda. Alongside the open working group discussions, the UN conducted a series of "global conversations".

ENERGY DIFFERENT SOURCES AND DEVELOPMENT

Introduction

- Major sources of energy in India are classified as –
  - Conventional sources (e.g. coal, petroleum, and nuclear power).
  - Non-conventional sources (e.g. solar energy, hydro energy, geo-thermal energy, etc.)
- Fossil fuel or conventional sources of energy are found exhaustible in nature and also not environmental friendly; on the other hand, the non-conventional sources of energy such as solar energy, wind energy, geo-thermal energy, tidal energy, etc. are renewable sources of energy and they are also environmental friendly (as they do not pollute environment).

Coal

- About 80% of the coal deposits in India is of bituminous type and is of non coking grade.
- The most important *Gondwana* coal fields of India are located in Damodar Valley region.
- Raniganj, Jharia, Bokaro, Giridih, and Karanpura are major coalfields of Jharkhand-Bengal coal belt.
- Jharia is the largest coal field followed by Raniganj.
- Other important coal mines are Singrauli (partially in Madhya Pradesh and partially in Uttar Pradesh); Korba in Chhattisgarh; Talcher and Rampur in Odisha; Chanda–Wardha, Kamptee, and Bander in Maharashtra; Singareni in Telangana; and Pandur in Andhra Pradesh.
- Tertiary coalfields are largely located in Darangiri, Cherrapunji, Mewlong, and Langrin in Meghalaya; Makum, Jaipur, and Nazira in upper Assam; Namchik – Namphuk in Arunachal Pradesh; and Kalakot in Jammu and Kashmir.

- ❖ The brown coal or lignite are found in the coastal areas of Tamil Nadu, Pondicherry, Gujarat, and Jammu and Kashmir.

Petroleum

- Hydrocarbons of liquid and gaseous states varying in chemical composition, color, and specific gravity are collectively known as petroleum resource.
- Petroleum industries produce various by-products; for example, fertilizer, synthetic rubber, synthetic fiber, medicines, vaseline, lubricants, wax, soap, and cosmetics.
- Crude petroleum normally occurs in sedimentary rocks of the tertiary period.
- For the systematic oil exploration and production, the **Oil and Natural Gas Commission was set up in 1956**.
- Digboi, Naharkatiya, and Moran are important oil producing areas in Assam.
- Ankaleshwar, Kalol, Mehsana, Nawagam, Kosamba, and Lunej are the major petroleum producing regions in Gujarat.
- Located 160 km off Mumbai, Mumbai high, an offshore oilfield was discovered in 1973. Production of petroleum at the field was started in 1976.
- Krishna-Godavari and Kaveri basin on the east coast are significant regions of petroleum production.
- Oil extracted from the wells remains in crude oil form and contains many impurities; hence, it needs to be extracted in oil refineries.
- Based on destination, there are two types of oil refineries — oil-field based (e.g. Digboi) and market based (Barauni).
- To transport and develop the market for natural gas, the **Gas Authority of India Limited** was set up in 1984 (it is a **public sector undertaking**).
- Though natural gas reserves have been located along the petroleum reserves, but some exclusive natural gas reserves are found along the eastern

coast of Tamil Nadu, Odisha, and Andhra Pradesh; as well as around Tripura, Rajasthan, and off-shore wells in Gujarat and Maharashtra.

Nuclear Energy

- Essential minerals used for the generation of nuclear energy are **uranium**and **thorium**.
- Geographically, uranium ores are found at many different locations along the Singbhum Copper belt.
- Other important uranium reserve regions are also found in Udaipur, Alwar, and Jhunjhunu districts of Rajasthan; Durg district of Chhattisgarh; Bhandara district of Maharashtra; and Kullu district of Himachal Pradesh.
- Thorium is mainly obtained from monazite and ilmenite, which is largely found along the coast of Kerala and Tamil Nadu.
- Palakkad and Kollam districts of Kerala have the world's largest monazite deposits.
- **Atomic Energy Commission** was established in 1948 and the **Atomic Energy Institute at Trombay** was founded in 1954.
- However, the Atomic Energy Institute at Trombay was renamed as Bhabha Atomic Research Centre in 1967.
- The important nuclear power projects are located at Tarapur (Maharashtra); Rawatbhata near Kota (Rajasthan); Kalpakkam (Tamil Nadu); Narora (Uttar Pradesh); Kaiga (Karnataka); and Kakarapara (Gujarat).

Solar Energy

- Solar energy is 7% more effective than coal or oil based plants and 10% more effective than nuclear plants.
- The western part of India has greater potential for the development of solar energy.

Other Sources of Energy

- The Ministry of Non-conventional Sources of Energy is responsible for the development of wind energy in India as the major source of renewable energy.
- **Ocean currents** are the store-house of infinite energy. Hence,

India has great potential for the development of **tidal** energy.

- **Natural hot springs** and **geysers** are being used since medieval period, but in the present world, these could be potential sources of renewable energy.
- **Manikaran**, a hot spring in Himachal Pradesh is a major renewable source of energy in India.
- **Bio-energy** is the energy derived usually from the biological products, such as agricultural residues and other bio-waste.
- Bio-energy can be converted into electrical energy, heat energy, and gas for cooking.
- Okhla in Delhi presents a good example by producing bio energy from municipal waste.

ENERGY SECTOR in tamilnadu

Introduction

Power sector is the most important sector among various infrastructure sectors in the country. Energy security and environmental Sustainability are vital to our future. Energy security is very important for economic growth. Renewable energy sources are essential in view of the depleting nature of conventional energy resources. Electricity is a critical infrastructure for sustainable growth of economy.

Power development is an important input for the States Industrial, Commercial and Socio economic growth. For this, the availability of affordable, reliable and quality power is necessary. Therefore, adequate provision has to be made for augmenting power supply to bridge the gap between demand and supply as well as to meet the increasing future demand. Keeping this in view, Government is giving utmost importance to power sector in Tamil Nadu.

Tamil Nadu has one of the best power utilities in the country and the power sector in the State has grown manifold in capacity generation. All the villages and the towns are fully electrified. Tamil Nadu Generation and Distribution Corporation Limited

(TANGEDCO) is responsible for power generation and distribution.

Tamil Nadu Transmission Corporation Limited (TANTRANSCO) is responsible for transmission of power. Further, the electricity network has been extended to all villages and towns throughout the State and all the villages in the State are 100% electrified.

GENERATION:

Present Status of Demand – Supply:

The present average demand of power in the State is around 14,500 MW. It is expected to go upto 17,500 MW by the end of 2018-19. This demand will be met by generation from existing power stations and power projects to be commissioned in the year 2018-19. At present this deficit is managed through power purchase and Restriction and Control measures. TANGEDCO is taking several steps to bridge the gap between demand and supply to provide uninterrupted power supply to the consumers.

The state as on installed capacity of 24,433 MW as on 31.3.2016.

RENEWABLE ENERGY SOURCES

The State is blessed with various forms of renewable energy sources. The environment-friendly renewable energy sources are perennial in nature, available locally and quite suitable for decentralized applications. The important renewable energy sources are as follows:

- Wind Energy (including offshore wind)
- Solar Energy
- Biomass and other forms of bio energy
- Small Hydro
- Tidal Energy
- Ocean Thermal Energy

Among the above mentioned sources, the first three renewable energy sources, viz., wind, solar and bio energy are being harnessed in a big way in India and also in Tamil Nadu. With a view to develop and propagate the non-conventional sources of energy, the Tamil Nadu Energy Development Agency (TEDA) was formed.

Apart from serving as a coordinating agency to promote and harness the use of renewable energy sources, TEDA acts as nodal agency to

the Ministry of New and Renewable Energy (MNRE), Government of India to implement centrally funded and sponsored schemes in the state.

Present Scenario – Renewable Energy Sources

Tamil Nadu is a leader in Renewable Energy. At present, the total installed capacity of renewable energy including solar, wind etc., is 10,480 MW. In the last wind season, the State has harnessed around 13,000 Million Units of energy from wind generators, which is an all time record. Also, the State has harnessed around 1,644 million units of energy from solar generators during 2016-17. Proactive steps are being taken to maintain this prominent position in renewable energy.

In the State, the contribution to the installed capacity is highest from wind energy, followed by biogases-based cogeneration plants in sugar industries. This has largely come through private investments encouraged by policy initiatives of the Central and the State Governments.

Solar Energy

1. Tamil Nadu has a very good solar potential with 300 clear sunny days as it receives very high solar radiation.
2. The Solar Photo Voltaic (SPV) technology which enables the direct conversion of sun light into electricity has several distinct advantages, since it does not have moving parts, produces no noise or pollution, requires very little maintenance and can be installed anywhere.
3. These advantages make them an ideal power source for use especially in remote and isolated areas which are not served by conventional electricity, making use of ample sunshine available in the State.
4. SPV technology provides for decentralized installations thereby minimizing the need for transmission infrastructure.
5. Tamil Nadu has total solar installed capacity of 2000 MW as on 08.04.2018. Considerable quantum of solar generation is being realized during day time to a tune of around 1200 MW to 1700 MW.

6. Further, an all-time high generation of 1498 MW and the all time maximum energy of 9.40 Million Units has been harnessed from solar generators on 27.03.2017.
7. It is proposed to increase the solar power installed capacity by further 5000 MW in a phased manner in the forthcoming years. In this regard a tender has been floated for the procurement of 1500 MW under reverse bidding route.

WIND ENERGY

Wind energy is one of the cleanest renewable sources of power. The potential area that are suitable for establishment of wind generators are mostly confined to the southern (Aralvoimozhi pass and Shengottai pass) and south western (Palghat and Cumbum pass) parts of the State.

Total installed capacity under wind mill generation is 7470.86 MW. Tamil Nadu tops in harnessing resources of energy among all Indian States of the installed capacity, thus making it a clear leader in the wind energy sector.

- Tamil Nadu is a pioneer in promoting wind energy in the country, with an installed capacity of 8197 MW as on 31.03.2018 (34.293 GW as on 30.06.2018) and which is the highest wind power capacity in the country and contributes to about 28.43% of the country's total installed wind power capacity.
- It is proposed to increase the wind installed capacity by further 4500 MW in a phased manner in the forthcoming years.
- As Tamil Nadu is already having a huge installed capacity of wind power which satisfies the States Renewable Energy Purchase Obligation (RPO), it is in a position to sell wind power to the other needy States who require this power to fulfill their RPO. During the last wind season around 120MW of wind power has been scheduled daily to Odisha as sale of green power.
- Similarly efforts are being taken to schedule around 500MW of green power daily to the needy States.

Biomass Energy

Bio-mass produced by green plants through photosynthesis using

sunlight, contains organic matter which could be converted to energy. Biomass can be obtained by raising energy plantations or may be obtained from organic waste.

The biomass resources can be used in bio-energy technologies viz., biogas, gasifier, biomass combustion, cogeneration, etc., to produce energy-thermal or electricity. Biomass can be used in three ways – one in the form of gas through gasifiers for thermal applications, second in the form of methane gas to run gas engines and produce power and the third through combustion to produce steam which drives a turbine to generate electricity.

Biomass power & cogeneration programme is implemented with the main objective of promoting technologies for optimum use of country's biomass resources for grid power generation and captive power production. Biomass materials used for power generation include juliaflora, bagasse, rice husk, straw, cotton stalk, coconut shells, soya husk, de-oiled cakes, coffee waste, jute wastes, groundnut shells, saw dust etc.

Biogas

A combustible gas (composed primarily of methane) produced when Organic waste, sewage or manure is fermented in the absence of oxygen. The solid material that remains in the digester after fermentation can be used as an organic fertilizer.

Biogas – a gas mixture of methane, carbon dioxide and small quantities of hydrogen and hydrogen sulphide – is created under air exclusion through the fermentation of organic substances with microorganism assistance. Biogas is a gas mixture, consisting of approximately 40 to 75 % methane (CH_4), 25 to 60 % carbon dioxide (CO_2), and approx. 2 % of other gases (hydrogen, hydrogen sulphide and carbon monoxide).

Advantages of Biogas

- No smoke , Clean Fuel
- Produces organic manure for a sustainable agriculture
- It reduces fossil fuel Dependency

FINANCE COMMISSION

Finance Commission

- According to Article 280 of Constitution, the President appoints a Finance Commission once in every 5 Years. This provision is also a Fundamental feature of Indian Constitution, which is not found in any other Constitution.
- The President has the power to appoint a new Finance Commission even before the expiry of 5 years, if he deems it necessary. In other words, the appointment of the Finance Commission is a continuous process according to our Constitution.

Objectives of Finance Commission

- To determine the basis for the allocation of funds collected from the taxes, which are divisible between the centre and the states.
- To formulate the principles regarding the grants to the states from the centre.

Important Share Price Index of the World

Finance Commission	Chairman	Finance Commission	Chairman
First (1951)	Mr KC Niyogi	9th (1987)	Mr.NKP Salve
2nd (1956)	Mr KA Santhanam	10th (1992)	Shri KC Pant
3rd (1961)	Mr AK Chanda	11th (1998)	Prof AM Khusro
4th (1966)	Mr RV Rajamannar	12th (2004)	Dr C Rangarajan
5th (1968)	Mr Mahaveer Tyagi	13th (2008)	Dr Vijay L Kelkar
6th (1972)	Mr Brahmananda Reddy	14th (2012)	YV Reddy
7th (1977)	Mr JM Shellat	15th (2020)	NK Singh
8th (1982)	Mr.YB. Chavan		

SL.NO.	Share Price Index	Stock Exchange
1.	Bovespa	Brazil
2.	Dow Jones	New York
3.	FTSE – 100	London
4.	HANG SENG	Hong Kong
5.	I.P.C.	Mexico
6.	Jakarta Composite	Indonesia
7.	KLSE Composite	Malaysia
8.	KOSPI	Korea
9.	MIBTel	Italy
10.	MID DAX	Frankfurt
11.	NASDAQ	U.S.A.
12.	Nikkei	Tokyo
13.	S & P	Canada
14.	Seoul Composite	S. Korea
15.	SHANGHAI Com	China
16.	SET	Thailand
17.	Straits Times Index	Singapore (SGX)/SIMEX [Singapore International Monitory Exchange (old name)]

Regulators in India

Regulator	Sectors	Chairman	Headquarter
Reserve Bank of India (RBI)	Financial system and monetary policy, Money Market	Urjit Patel	Mumbai
Securities and Exchange Board of India (SEBI)	Security & Capital Market, Stock broking & Merchant Banking, Nidhis, Chit Fund Companies	Ajay Tyagi	Mumbai
Insurance Regulatory and Development Authority (IRDA)	Insurance Industry	Subhash Chandra Khuntia	Hyderabad
Telecom Regulatory Authority of India (TRAI)	Telecommunication Industry	Ram Sewat Sharma	New Delhi
Forward Markets Commission	Commodity Market	Ramesh Abhishek	Mumbai
Pension Fund Regulatory and Development Authority (PFRDA)	Pension sector	Hemant Contractor	New Delhi

PLANNING
COMMISSION & NDC

Planning :

- In the words of Barbara Wootten, "Planning may be defined as the conscious and deliberate choice of economic priorities by some public authorities".
- Economic planning refers to the path of actions interns of policy measures to be followed in future in pursuance of per determine objectives.
- Planning involves setting of quantifiable goals in pursuance of the broad objectives along with the strategy to achieve those goals.

Objectives of Planning in India :

- A major function of the Planning Commission was to "formulate a plan for the most effective and balanced utilization of the country's resources".
- Growth with social justice is our basic goal.
- The main objectives of Planning in India may be grouped under the following heads:

1. Economic Growth
2. Modernization
3. Social justice
4. Self reliance
5. Social equality
6. Full employment
7. Removal of poverty
8. Technologic up gradation

The other objectives of developmental planning in India :

- To raise the national income. This is known as Growth Objective ;
- To increase investment to a certain level within a given time ;
- To reduce inequalities in the distribution of income and wealth and to reduce concentration of economic power over resources ;
- To expand employment opportunities and elimination of poverty

- To setup a society based on equality and justice and absence of exploitation.
- To remove bottlenecks in agriculture, manufacturing industry and the balance of payments.

History of Planning in India :

- First attempt to initiate economic planning in India was made by Sir M. Visvesvarayya, in 1934 through his book, 'Planned Economy for India'. He was called as father of Indian planning.
- In 1938, National Planning Committee was set up by Subhash Chandra Bose and chaired by Jawaharlal Nehru.
- In 1944, Bombay Plan was presented by 8 leading industrialists of Bombay.
- In 1944, Gandhian Plan was given by S N Agarwal.
- In August 1944, The British India government set up Planning and Development Department under the charge of Ardeshir Dalal.
- In 1945, People's Plan was given by M N Roy.
- In 1950, Sarvodaya Plan was given by J P Narayan.
- In 1946 the Interim Government was formed and it established a high level advisory planning board in order to study the problems of planning.
- In 1947, Economic Programme Committee (EPC) was formed under the chairmanship of Nehru and in 1948 it recommended the formation of permanent planning commission.

I. PLANNING COMMISSION

- The Government of India constituted planning commission on March 15th, 1950.
- Every planning decision in India originates from the planning commission and is finally approved by the National Development Council, constituted on August 1952**.**
- The planning commission has fixed the period of plans at five years.

Planning Commission:

1. It is an extra constitutional body
2. Non constitutional body
3. Non statutory body

4. Advisory body
5. Executive body

- It is an extra – constitutional (i.e. non-constitutional) and non-statutory body.

Functions

- Formulate a plan for the most effective and balanced utilization of the country's resources.
- On a determination of priorities, define the stages in which the plan should be carried out and propose the allocation of resources for the due completion of each stage.
- Indicate the factors which are tending to retard economic development, and determine the conditions which, in view of the current social and political situation, should be established for the successful execution of the plan.
- Determine the nature of the machinery which will be necessary for securing the successful implementation of each stage of the plan in all its aspects.
- To evaluate from time to time the progress achieved in every stage of plan and also to suggest remedial measures.
- To advise the Centre and the State Governments from time to time on special matters referred to the commission.

Composition of Planning Commission

- Planning commission is composed of eight members.
- Prime Minister (Ex-Officio Chairman)
- Four full time members (including deputy chairman)
- Secretary

Major Sources of Financing Plans

- The major sources of financing development programmes are as follows:

i. Government savings which consist of Surplus on revenue budget i.e., excess of current revenue over current expenditure, Additional taxation and surpluses of the Public Enterprises (PEs).

The major sources of domestic borrowings are:

Public loans and small savings and Deficit financing.

II. NATIONAL DEVELOPMENT COUNCIL – NDC

1. National Development Council is a non-statutory body, which was constituted to build co-operation between the States and the Planning Commission for economic planning.
2. The National Development Council was constituted on 6th August 1952. The National Development Council is an important organization, whose main functions are as follows:
   - ✓ To evaluate the implementation of National Planning from time to time.
   - ✓ To examine the social and economic policies that influences the economic development.
   - ✓ To give suggestions in order to achieve the determined goals in National Plan.
   - ✓ To study the plan prepared by the Planning Commission and after mutual discussions give it the final shape. It is only after its ratification that the format of the five-year plan is released.

Strategies of Planning :

1. Harrod Domar Strategy :

- ❖ First five year plan was based on it.
- ❖ It emphasized the role of capital accumulation's dual character. i.e. increases national income on one side and increases production capacity on other side.

2. Nehru-Mahalanobis Strategy :

- ❖ Second five year plan was based on it.
- ❖ It is a two sector model- Consumer goods sector and capital goods sector.
- ❖ It emphasized investment in heavy industry to achieve rapid industrialisation.
- ❖ Here the state controlled the commanding heights of economy through the public sector.
- ❖ It was based on Russian experience.
- ❖ The objective was to be self-reliant and overcome capital contrivance.

3. Gandhian Strategy :

- ❖ It was enunciated by Acharya S.N. Agarwal in his Gandhian plan.
- ❖ The main objective was 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.

LPG Strategy
(*Liberalisation, Privatisation and Globalisation) :*

- It was introduced by Dr.Manmohan Singh in 1991. Under Prime Minister Narashima Rao Government.
- It ended the licence permit raj and opened hitherto areas reserved for the public sector to private sector.

PURA Strategy (Providing Urban Amenities in Rural Areas)

- It was introduced by former President Dr.APJ Abdul Kalam.
- Government implemented this strategy in their programmers since 2004.
- The objective is to propel economic development without population transfers.
- It emphasizes on three connectivities i.e Physical, Electronic and Knowledge which enhance the prosperity of cluster of villages in rural areas.

Types of Planning :

1. Centralized Planning :

- In a socialist economy (eg. Former Soviet Russia), there was centralized planning; it was planning by direction (Imperative Planning).
- All economic decisions are taken by central authority. Government or Central Authority decides upon every aspects of Economic plan, determines objectives sets targets & priorities.
- In a socialist state, most of the means of production are owned by the State.
- This strategy is also called new grandma strategy of development.

2. Decentralised Planning :

- It is connected with the capitalistic economies and implemented through market mechanism.
- It empowers the individuals or small groups to carry out their plans for the achievement of a common goal.

3. Structural Planning :

- ❖ It aims at bringing changes in socio-economic set up of country.
- ❖ In this system of planning land-lord system was abolished, collective farming was introduced, trade, industries and transport system was nationalised.

4. Functional Planning :

- ❖ No changes brought in the existing socio economic set up and planning made in the context to existing institutions.
- ❖ The planning that is made to ensure smooth working of the organisation taking into account the needs of each and every department.
- ❖ The purpose of functional planning is to promote standardised administrative practices.

5. Planning by Inducement :

- ❖ It is often referred as 'market incentives'.
- ❖ In a democracy, Planning is done by inducement.
- ❖ This type of planning is mostly found in a country that follows mixed economy.
- ❖ The government has to persuade the industries in the private sector to fullfil the goals of the Plan through inducements such as tax concessions and by providing incentives.

'Planning in India' derives its objectives and social premises from the 'Directive Principles of State Policy'

6. Indicative planning :

- ❖ This type planning found in capitalist country.
- ❖ In this type of planning, the government invites representatives of industry, and business and discuss with them in advance what it proposes to do in the Plan under question and indicates to them its priorities and goals.
- ❖ Then the Plan is formulated after detailed discussions.
- ❖ After we embraced liberalization and privatization policies in 1991,(8th five year plan) our Indian planning has become indicative planning.

7. Short term plans :

- ❖ Short term plans are Annual Plans.
- ❖ They are also known as controlling plans.

- During the period of implementation, Five Year Plans operated by dividing them into Annual Plans.
- The main objective of short term plan is to raise the revenue, attain the short-term economic targets, bring price stability and remove deficit in Balance of Payment(BOP).

8. Midterm plans :

- It lasts for a period of 3 to 7 years.
- Our Five Year Plans are in fact, midterm plans.
- It is related to allocation of financial resources and physical resources.

9. Long-term plans :

- It lasts for a period of 10-30 years.
- They are also known as **'Perspective plans'.**

10. Perspective plans

- First long term plan was Goelro plan (1920-35) implemented in USSR.
- To bring about structural and functional changes in the Economy.

11. Rolling Plan :

- In this plan, every year the performance of the plan will be assessed and a new plan will be made next year based upon this assessment.
- In the rolling plans there are three kinds of plans.
  1. First is the plan for the current year which comprises the annual budget.
  2. Second is the plan for a fixed number of years, which may be 3, 4 or 5 years. This second plan is kept changing as per the requirements of the economy.
  3. Third is a perspective plan which is for 10, 15 or 20 years.

12. Core Plan :

- Here the planning commission asks the state to submit their projected revenue estimates.
- Then it determines the expenditure heads for state annual plans.
- This helps in keeping the plan target to realistic limits and prevents the diversion of funds from the priority items to the non plan account.

Niti Aayog CEO - Amitabhkant

Vice Chairperson of NITI Aayog Mr. Aravind Panagariyua

National Institution for Transforming India Aayog (NITI)

*Government has replaced the erstwhile **Planning Commission** with the **NITI (National Institution for Transforming India) Aayog on January 1, 2015.** NITI Aayog has a unique innovative framework to facilitate states to participate in policy making. The Aayog has been mandated to serve as a policy think-tank for the central as well as state governments and has **Prime Minister as its Chairperson**. NITI Aayog represents an innovative and appropriate institutional framework to replace Planning Commission, which had lost its relevance and effectiveness in the post-reform era. With a new focus on sound strategic and technical advice covering the entire gamut of socio-economic policy issues within a unique framework of Cooperative Federalism, NITI Aayog is expected to transform Indian Economy into a formidable economic super power in the years to come.*

Unlike this predecessor, NITI Aayog will have all Chief Ministers and lt. Governors on its Governing Council in the spirit of cooperative federalism. Besides, it will also have Regional Councils, which would be formed to address specific issues and contingencies impacting more than one state or a region. The Aayog will also have experts, specialists and practitioners with relevant domain knowledge nominated by the Prime Minister as special invitees.

Planning Commission released Vision document (India Vision 2020) on January 2003.