CHAPTER

7

Indian Economy





"India will be a global player in the digital economy"

-Sunder Pichai, CEO Google

(6) Learning Objectives

- To understand the current status of the Indian Economy in terms of features, Natural resources, infrastructure facilities and so on.
- To understand the contributions of major Indian Economic Thinkers.

7 1

Meaning of Growth and Development

A country's economic growth is usually measured by National Income, indicated by **Gross Domestic Product (GDP)**. The GDP is the total monetary value of the goods and services produced by that country over a specific period of time, usually one year.

The level economic development is indicated not just by GDP, but by an increase in citizens' quality of life or well-being. The quality of life is being assessed by several indices such as Human Development Index (HDI), Physical

Quality of Life Index (PQLI) and Gross National Happiness Index (GNHI).

Gross National Happiness Index (GNHI)

The term "Gross National Happiness" was coined by the fourth king of Bhutan, Jigme Singye Wangchuck, in 1972. It is an indicator of progress, which measures sustainable development, environmental conservation promotion of culture and good governance.

On the basis of the level of economic development, nations are classified as developed and developing economies.

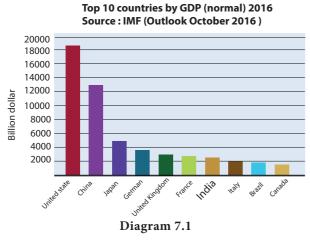


Developed economies are those countries which are industrialised, utilise their resources efficiently and have high per capita income. The USA, Canada, U.K, France, and Japan are some of the developed economies. Developed economies are also termed as Advanced Countries. On the other hand, countries which have not fully utilized their resources like land, mines, workers, etc., and have low per capita income are termed as under developed economies. Examples of underdeveloped countries are Sub Saharan Africa, BanglaDesh, Myanmar, Pakistan, Indonesia etc. They are also termed as Under developed Countries or Backward Nations or Third World Nations.

7.2

Indian Economy

GDP Growth Rate



Indian economy is the Seventh largest economy of the world. Being one of the top listed countries. In terms of industrialization and economic growth, India holds a robust position with an average growth rate of 7% (approximately).

Even though the rate of growth has been sustainable and comparatively stable, there are still signs of backwardness.

Indian Economy

Features of a Developed Economy

- 1) High National Income
- 2) High Per Capita Income
- 3) High Standard of Living
- **4)** Full Employment of Resources
- 5) Dominance of Industrial Sector
- **6)** High Level of Technology
- 7) High Industrialisation
- 8) High ConsumptionLevel
- 9) High Level of Urbanisation
- 10) Smooth Economic Growth
- **11)** Social Equity, Gender Equality and Low Levels of Poverty
- **12)** Political Stability and Good Governance

The diametrically opposite features of Indian Economy are discussed below in detail.

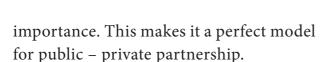
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Features of Indian Economy

7.3.1 Strengths of Indian Economy

1. India has a mixed economy

Indian economy is a typical example of mixed economy. This means both private and public sectors co-exist and function smoothly. On one side, some of the fundamental and heavy industrial units are being operated under the public sector, while, due to the liberalization of the economy, the private sector has gained



2. Agriculture plays the key role

Agriculture being the maximum pursued occupation in India, it plays an important role in its economy as well. Around 60% of the people in India depend upon agriculture for their livelihood. In fact, about 17% of our GDP today is contributed by the agricultural sector. Green revolution, ever green revolution and inventions in bio technology have made agriculture self sufficient and also surplus production. The export of agricultural products such as fruits, vegetables, spices, vegetable oils, tobacco, animal skin, etc. also add to forex earning through international trading.

3. An emerging market

India has emerged as vibrant economy sustaining stable GDP growth rate even in the midst of global downtrend. This has attracted significant foreign capital through FDI and FII.India has a high potential for prospective growth. This also makes it an emerging market for the world.

4. Emerging Economy

WORLD NATION IN G-20					
1. Argentina	11. Italy				
2. Australia	12. Japan				
3. Brazil	13. Mexico				
4. Canada	14. Russia				
5. China	15. Saudi Arabia				
6. European Union	16. South Africa				
7. France	17. South Korea				
8. Germany	18. Turkey				
9. India	19. United Kingdom				
10. Indonesia	20. United States				

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Emerging as a top economic giant among the world economy, India bags the **seventh** position in terms of nominal *Gross Domestic Product (GDP)* and **third** in terms of *Purchasing Power Parity (PPP)*. As a result of rapid economic growth Indian economy has a place among the G20 countries.

5. Fast Growing Economy

India's economy is well known for high and sustained growth. It has emerged as the world's fastest growing economy in the year 2016-17 with the growth rate of 7.1% in GDP next to People's Republic of China.

6. Fast growing Service Sector

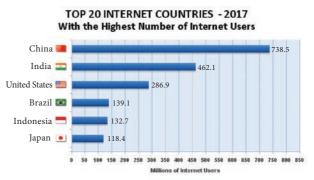
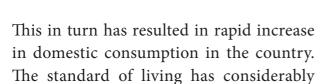


Diagram 7.2

The service sector, contributes a lion's share of the GDP in India. There has been a high rise growth in the technical sectors like Information Technology, BPO etc. These sectors have contributed to the growth of the economy. These emerging service sectors have helped the country go global and helped in spreading its branches around the world.

7. Large Domestic consumption

With the faster growth rate in the economy the standard of living has improved a lot.



8. Rapid growth of Urban areas

improved and life style has changed.

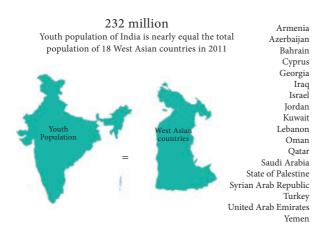
Urbanization is a key ingredient of the growth of any economy. There has been a rapid growth of urban areas in India after independence. Improved connectivity in transport and communication, education and health have speeded up the pace of

9. Stable macro economy

urbanization.

The Indian economy has been projected and considered as one of the most stable economies of the world. The current year's Economic survey represents the Indian economy to be a "heaven of macroeconomic stability, resilience and optimism. According to the Economic Survey for the year 2014-15, 8%-plus GDP growth rate has been predicted, with actual growth turning out to be a little less (7.6%). This is a clear indication of a stable macroeconomic growth.

10. Demographic dividend



population is not only motivated but skilled and trained enough to maximize the growth. Thus human capital plays a key role in maximizing the growth prospects in the country. Also, this has invited foreign investments to the country and outsourcing opportunities too.

7.3.2 Weakness of Indian

The human capital of India is young. This means that India is a pride owner of the

maximum percentage of youth. The young

7.3.2 Weakness of Indian Economy

1. Large Population

India stands second in terms of size of population next to China and our country is likely to overtake china in near future. Population growth rate of India is very high and this is always a hurdle to growth rate. The population growth rate in India is as high as 1.7 per 1000. The annual addition of population equals the total population of Australia.

2. Inequality and poverty

There exists a huge economic disparity in the Indian economy. The proportion of income and assets owned by top 10% of Indians goes on increasing. This has led to an increase in the poverty level in the society and still a higher percentage of individuals are living Below Poverty Line (BPL). As a result of unequal distribution of the rich becomes richer and poor becomes poorer.

3. Increasing Prices of Essential Goods

Even though there has been a constant growth in the GDP and growth

opportunities in the Indian economy, there have been steady increase in the prices of essential goods. The continuous rise in prices erades the purchasing power and adversely affects the poor people, whose income is not protected.

4. Weak Infrastructure

Even though there has been a gradual improvement in the infrastructural development in the past few decades, there is still a scarcity of the basic infrastructure like power, transport, storage etc.

5. Inadequate Employment generation

With growing youth population, there is a huge need of the employment opportunities. The growth in production is not accompanied by creation of job. The Indian economy is characterized by 'jobless growth'.

6. Outdated technology

The level of technology in agriculture and small scale industries is still outdated and obsolete.

7.3.3 Demographic trends in India

Scientific study of the characteristics of population is known as Demography. The various aspects of demographic trends in India are:

- Size of population
- Rate of growth
- Birth and death rates
- Density of population

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- Sex-ratio
- Life-expectancy at birth
- Literacy ratio

a. Size of Population

Table 7.1 Population Growth

Census Year	Population (in crores)	Average annual growth rate			
1901	23.84	-			
1911	25.21	0.56			
1921	25.13	-0.03			
1931	27.90	1.04			
1941	31.87	1.33			
1951	36.11	1.25			
1961	43.92	1.96			
1971	54.81	2.20			
1981	68.33	2.22			
1991	84.33	2.16			
2001	102.70	1.97			
2011	121.02	1.66			

(Source: Registrar General of India)

Over a period of 100 years, India has quadrupled its population size. In terms of, size of population, India ranks 2nd in the world after China. India has only about 2.4% of the world's geographical area and contributes less than 1.2% of the world's income, but accommodates about 17.5% of the world's population. In other words, every 6th person in the world is an Indian. Infact, the combined population of just two states namely, Uttar Pradesh and Maharashtra is more than the population of United States of America, the third most populous country of the world. Some of the states in India have larger population than many countries in the world.

The negative growth during 1911-21 was due to rapid and frequent occurrence of epidemics like cholera, plague and influenza and also famines. The year 1921 is known as the 'Year of

During 1951, population growth rate has come down from 1.33% to 1.25%. Hence it is known as 'Year of Small divide'.

Great Divide' for India's population as

population starts increasing.

In 1961, population of India started increasing at the rate of 1.96% i.e, 2%. Hence 1961 is known as 'Year of Population Explosion'. In the year 2001, the Population of India crossed one billion (100 crore) mark.

The 2011 census reveals growth of youth population which is described as 'demographic transition'.

b. Birth rate and death rate

Crude Birth rate: It refers to the number of births per thousand of population.

Crude Death rate: It refers to the number of deaths per thousand of population.

Crude birth and death rates of India during various years.

Table 7.2Birth rate and death rate

Year	C.B.R	C.D.R.
1951	39.9	27.4
2001	25.4	8.4
2011	21.8	7.11

(Source: Registrar General of India)

Birth rate was 39.9 in 1951; it fell to 21.8 in 2011. Although the birth rate has declined, the decline is not so remarkable. The death rate

has declined from 27.4 in 1951 to 7.1 in 2011. However, from the data it is clear that the fall in birth rates is less than that of death rates.

Kerala has the lowest birth rate (14.7) and Uttar Pradesh has the highest birth rate (29.5). West Bengal has the lowest death rate (6.3) and Orissa (9.2) has the highest. Among States, Bihar has the highest decadal (2001-11) growth rate of population, while Kerala has the lowest growth rate. The four states Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh called *BIMARU* states have very high population.

c. Density of population

It refers to the average number of persons residing per square kilometre. It represents the man-land ratio. As the total land area remains the same, an increase in population causes density of population to rise.

Density of population $= \frac{\text{Total population}}{\text{Land area of the region}}$

Table 7.3 Density of population

Year	Density of population (No. of persons per sq. km)
1951	117
2001	325
2011	382

(Source: Registrar General of India)

Just before Independence, the density of population was less than 100. But after independence, it has increased rapidly from 117 in 1951 to 325 in 2001. According to 2011 census, the present Density of population is 382. Thus, the pressure of population on land has been rising. Kerala,

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West Bengal, Bihar and Uttar Pradesh have density higher than the India's average density. Bihar is the most densely populated state in the country with 1,102 persons living per sq.km followed by West Bengal with 880. Arunachal Pradesh has low density of population of only 17 persons.

d. Sex ratio

It refers to the number of females per 1,000 males. It is an important indicator to measure the extent of prevailing equity between males and females at a given point of time.

Table 7.4 Sex Ratio

Census year	Sex ratio (Number of females per 1000 males)			
1951	946			
2001	933			
2011	940			

(Source: Registrar General of India)

In India, the sex ratio is more favourable to males than to females. In Kerala, the adult sex ratio is 1084 as in 2011. The recent census (2011) shows that there has been a marginal increase in sex ratio. Haryana has the lowest sex ratio of 877 (2011) among other states, while Kerala provides better status to women as compared to other States with 1084 females per 1000 males

e. Life expectancy at birth

It refers to the mean expectation of life at birth. Life expectancy has improved over the years. Life expectancy is low when death rate is high and / or instances of early death are high. On the other hand, life expectancy is high when death rate is low and / or instances of early death are low.

Table 7.5 Life Expectancy

Year	Male	Female	Overall	
1951	32.5	31.7	32.1	
1991	58.6	59.0	58.7	
2001	61.6	63.3	62.5	
2011	62.6	64.2	63.5	

(Source: Registrar General of India)

During 1901 – 11, life expectancy was just 23 years. It increased to 63.5 years in 2011. A considerable fall in death rate is responsible for improvement in the life expectancy at birth. However the life expectancy in India is very low compared to that of developed countries.

f. Literacy ratio

It refers to the number of literates as a percentage of the total population. In 1951, only one-fourth of the males and one-twelfth of the females were literates. Thus, on an average, only one-sixth of the people of the country were literates. In 2011, 82% of males and 65.5% of females were literates giving an overall literacy rate of 74.04% (2011). When compared to other developed countries and even Sri Lanka this rate is very low.

Table 7.6 Literacy ratio

Census year	Literate persons	Males	Females
1951	18.3	27.2	8.9
2001	64.8	75.3	53.7
2011	74.04	82.1	65.5

(Source: Registrar General of India)

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Kerala has the highest literacy ratio (94%), Mizoram (91.3%), followed by Goa (88.7%), Himachal Pradesh (82.8%), Maharastra (82.3%), Sikkim (81.4%), and Tamil Nadu (80.1%). Bihar has the lowest literacy ratio (61.8%) in 2011.

7.4

Natural Resources

Any stock or reserve that can be drawn from nature is a Natural Resource. The major natural resources are - land, forest, water, mineral and energy. India is rich in natural resources, but majority of the Indians are poor. Nature has provided with diverse climate, several rivers for irrigation and power generation, rich minerals, rich forest and diverse soil.

Types of Natural resources

- (a) Renewable Resources: Resources that can be regenerated in a given span of time. E.g. forests, wildlife, wind, biomass, tidal, hydro energies etc.
- (b) Non-Renewable Resources: Resources that cannot be regenerated. E.g. Fossil fuelscoal, petroleum, minerals, etc.

7.4.1 Land Resources

In terms of area India ranks seventh in the world with a total area of 32.8 lakh sq. km. It accounts for 2.42% of total area of the world. In absolute terms India is really a big country. However, land- man ratio is not favourable because of the huge population size.

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According to Agricultural Census, the area operated by large holdings (10 hectares and above) has declined and area operated under marginal holdings (less than one hectare) has increased. This indicates that land is being fragmented and become ineconomic.

7.4.2 Forest Resources

India's forest cover in 2007 is 69.09 million hectare which constitutes 21.02 per cent of the total geographical area. Of this, 8.35 million hectare is very dense forest, 31.90 million hectare is moderately dense forest and the rest 28.84 million hectare is open forest.

7.4.3 Important Mineral Resources

a. Iron-Ore

India possesses high quality iron-ore in abundance. The total reserves of iron-ore in the country are about 14.630 million tonnes of haematite and 10,619 million tonnes of magnetite. Hematite iron is mainly found in Chattisgarh, Jharkhand, Odisha, Goa and Karnataka. The major deposit of magnetite iron is available at western coast of Karnataka. Some deposits of iron ore are also found in Kerala, Tamil Nadu and Andhra Pradesh.

b. Coal and Lignite

Coal is the largest available mineral resource. India ranks third in the world after China and USA in coal production. The main centres of coal in India are the West Bengal, Bihar, Madhya Pradesh, Maharashtra, Odisha and Andhra Pradesh. Bulk of the coal production comes from Bengal-Jharkhand coalfields.

c. Bauxite

Bauxite is a main source of metal like aluminium. Major reserves are concentrated in the East Coast bauxite deposits of Odisha and Andhra Pradesh.

d. Mica

Mica is a heat resisting mineral which is also a bad conductor of electricity. It is used in electrical equipments as an insulator. India stands first in sheet mica production and contributes 60% of mica trade in the world. The important mica bearing pegmatite is found in Andhra Pradesh, Jharkhand, Bihar and Rajasthan.

e. Crude Oil

Oil is being explored in India at many places of Assam and Gujarat. Digboi, Badarpur, Naharkatia, Kasimpur, Palliaria, Rudrapur, Shivsagar, Mourn (All in Assam) and Hay of Khambhat, Ankaleshwar and Kalol (All in Gujarat) are the important places of oil exploration in India.

f. Gold

India possesses only a limited gold reserve. There are only three main gold mine regions—Kolar Goldfield, Kolar district and Hutti Goldfield in Raichur district (both in Karnataka) and Ramgiri Goldfield in Anantpur district (Andhra Pradesh).

g. Diamond

As per UNECE (United Nations Economic Commission for Europe) the total reserves of diamond is estimated at around 4582, thousand carats which are mostly available in Panna (Madhya Pradesh), Rammallakota of Kurnur district of Andhra Pradesh and also in the Basin of Krishna River. The new

Kimberlile fields have been discovered in Raipur and Pastar districts of Chattisgarh, Nuapada and Bargarh districts of Odisha, Narayanpet – Maddur Krishna areas of Andhra Pradesh and Raichur-Gulbarga districts of Karnataka.

7.5

Infrastructure

Infrastructural development means the development of many support facilities. These facilities may be divided into (a) economic infrastructure and (b) social infrastructure. Economic infrastructure includes - transport, communication, energy, irrigation, monetary and financial institutions. Social infrastructure includes - education, training and research, health, housing and civic amenities.

7.6

Economic Infrastructure

Economic infrastructure is the support system which helps in facilitating production and distribution. For instance, railways, trucks, posts and telegraph offices, ports, canals, power plants, banks, insurance companies etc. are all economic infrastructure of an economy. They help in the production of goods and services.

7.6.1 Transport

For the sustained economic growth of a country, a well-connected and efficient



transport system is needed. India has a good network of rail, road, coastal shipping, and air transport. The total length of roads in India being over 30 lakh km, India has one of the largest road networks in the world. In terms of railroads, India has a broad network of railroad lines, the largest in Asia and the fourth largest in the world. The total rail route length is about 63,000 km and of this 13,000 km is electrified. The major Indian ports including Calcutta, Mumbai, Chennai, Vishakhapatnam and Goa handle about 90% of sea- borne trade and are visited by cargo carriers and passenger liners from all parts of the world. A comprehensive network of air routes connects the major cities and towns of the country. The domestic air services are being looked after by Indian Airlines and private airlines. The international airport service is looked after by Air India.

Indian Railways Provide Wi-Fi Facility First in India is Bangalore Railway Station

Air India and Indian Airlines were merged on August 27, 2007 to from National Aviation Company of India Ltd. (NACIL)

The National Harbour board was set up in1950 to advise the Central and State Governments on the management and development of ports, particularly minor ports

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7.6.2 Energy

Electrical energy is one of the necessary components of our life. Nowadays, without electricity, we cannot survive in this world of technology. The energy sources are classified under two heads based on the availability of the raw materials used, while generating energy.

- 1. Non-renewable energy sources
- 2. Renewable energy sources

1. Non-renewable energy sources

As the name suggests, the sources of energy which cannot be renewed or re-used are called non-renewable energy sources. Basically these are the energy sources which will get exhausted over a period of time. Some of the examples of this kind of resources are coal, oil, gas etc.

2. Renewable energy sources

These are the kind of energy source which can be renewed or reused again and again. These kinds of materials do not exhaust or literally speaking these are available in abundant or infinite quantity. Example for this kind include

- 1. Solar energy
- 2. Wind energy
- **3**. Tidal energy
- **4**. *Geothermal energy*
- **5**. Biomass energy

Sometimes renewable sources are also called non-conventional sources of energy since, these kinds of materials or these ways of energy production were not used earlier or conventionally.

7.7

Social Infrastructure

Social infrastructure refers to those structures which are improving the quality of manpower and contribute indirectly towards the growth of an economy. These structures are outside the system of production and distribution. development of these social structures help in increasing the efficiency and productivity of manpower. For example, schools, colleges, hospitals and other civic amenities. It is a fact that one of the reasons for the low productivity of Indian workers is the lack of development of social infrastructure. The status and developments in the social infrastructure in India are discussed below.

7.7.1 Education

a. Education in India

Imparting education on an organized basis dates back to the days of 'Gurukul' in India. Since then the Indian education system has flourished and developed with the growing needs of the economy. The Ministry of Human Resource Development (MHRD) in India formulates education policy in India and also undertakes education programs.

b. Education system in India

Education in India until 1976 was the responsibility of the State governments. It was then brought under concurrent list (both Centre and State). The Centre is represented by the Ministry of Human Resource Development decides the India's education budget.

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The education system in India consists of primarily six levels:

- Nursery Class
- Primary Class
- Secondary Level
- Higher Secondary Level
- Graduation
- Post-Graduation

c. Education Institutions in India:

Education in India follows the 10+2 pattern. For higher education, there are various State run as well as private institutions and universities providing a variety of courses and subjects. The accreditation of the universities is decided under the University Grants Commission Act. The Education Department consists of various schools, colleges and universities imparting education on fair means for all sections of the society. The budget share of the education sector is around 3% of GDP, of this largest proportion goes for school education. However, per pupil expenditure is the lowest for school students.

7.7.2 Health

a. Health in India

Health in India is a state government responsibility. The Central Council Of Health and Welfare formulates the various health care projects and health department reform policies. The administration of health industry in India as well as the technical needs of the health sector are the responsibility of the Ministry Of Health And Welfare.

Health care in India has many forms. These are the ayurvedic medicine



practice, unani or galenic herbal care, homeopathy, allopathy, yoga, and many more. Each different healthcare form has its own treatment system and practice patterns. The medical practicing in India needs a proper licensing from the Ministry of Health. All medical systems are now under one ministry viz AYUSH.

b. Health Care Services in India:

The health care services in India are mainly the responsibility of the Ministry of Health. State wise, health status is better in Kerala as compared to other States. Compared to other developed countries, India's health status is not satisfactory. India's health status is poor compared to Sri Lanka.

7.8

Contributions of Indian Economic Thinkers

7.8.1 Thiruvalluvar



The economic ideas of Thiruvalluvar are found in his immortal work, Thirukkural, a book of ethics. Even though scholars differ widely over the estimation of the

period of Thiruvalluvar, it is generally believed that, he belongs to the Sangam age in Tamil Nadu around third century A.D. Thiruvalluvar's work is marked by pragmatic idealism.

A large part of Valluvar's economic ideas are found in the second part of Thirukkural, the porutpal. It deals with wealth. Thiruvalluvar is a fundamental thinker. He believes that rains are the basic

support of life. Since rain provides food, it forms the basis for stable economic life. Agriculture which is the most fundamental economic activity depends on rain,"It is rain that both ruins and aids the ruined to rise".

a. Factors of Production

Thiruvalluvar has made many passing references about the factors of production viz., Land, Labour, Capital, Organisation, Time, Technology etc. He says, "Unfailing harvest, competent body of men, group of men, whose wealth knows no diminution, are the components of an economy".(Kural 61)

b. Agriculture

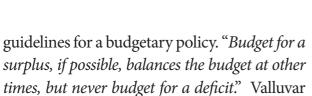
According to Thiruvalluvar, agriculture is the most fundamental economic activity. They are the axle-pin of the world, for on their prosperity revolves prosperity of other sectors of the economy, "The ploughmen alone", he says "live as the freemen of the soil; the rest are mere slaves that follow on their toil" (Kural 1032). Valluvar believes that agriculture is superior to all other occupation.

c. Public Finance

Thiruvalluvar has elaborately explained Public Finance under the headings Public Revenue, Financial Administration and Public expenditure. He has stated these as 1) Creation of revenue, 2) Collection of revenue, 3) Management of revenue 4) Public expenditure

d. Public Expenditure

Valluvar has recommended a balanced budget. " It is not a great misfortune for a state if its revenues are limited, provided the expenditure is kept within bounds." He has given certain



advocates the following main items of public expenditure: 1) Defence 2) Public Works and 3) Social Services.

e. External Assistance

Valluvar was against seeking external assistance. According to Kural No. 739, countries taking external assistance are not to be considered as countries at all. In other words, he advocated a self-sufficient economy.

f. Poverty and Begging

Valluvar consideres freedom from hunger as one of the fundamental freedoms that should be enjoyed by every citizen. According to him 'poverty' is the root cause of all other evils which would lead to ever-lasting sufferings. It is to be noted that the number of people living below poverty line, begging, sleeping on the roadsides and rag picking in India has been increasing.

g. Wealth

Valluvar has regarded wealth as only a means and not an end. He said, "Acquire a great fortune by noble and honorable means." He condemned hoarding and described hoarded wealth as profitless richness. To him industry is real wealth and labour is the greatest resource.

h. Welfare State

Thiruvalluvar is for a welfare state. In a welfare state there will be no poverty illiteracy, disease and industry. The important elements of a welfare state are 1) perfect health of the people without disease 2) abundant wealth,

3) good crop 4) prosperity and happiness and 5) full security for the people.

7.8.2 Mahatma Gandhi

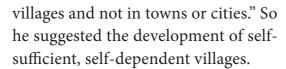
Gandhian Economics is based on ethical foundations. In 1921, Gandhi wrote, "Economics that hurts the moral well-being of an



individual or a nation is immoral, and therefore, sinful." Again in 1924, he repeated the same belief: "that economy is untrue which ignores or disregards moral values".

Salient Features of Gandhian Economic Thought

- 1. Village Republics: To Gandhi, India lives in villages. He was interested in developing the villages as self-sufficient units. He opposed extensive use of machinery, urbanization and industrialization.
- 2. On Machinery: Gandhi described machinery as 'Great sin'. He said that "Books could be written to demonstrate its evils... it is necessary to realize that machinery is bad. Instead of welcoming machinery as a boon, we should look upon it as an evil. It would ultimately cease.
- **3. Industrialism**: Gandhi considered industrialism as a curse on mankind. He thought industrialism depended entirely on a country's capacity to exploit.
- 4. **Decentralization:** He advocated a decentralized economy, i.e., production at a large number of places on a small scale or production in the people's homes.
- **5. Village Sarvodaya:** According to Gandhi, "Real India was to be found in



- 6. **Bread Labour**: Gandhi realized the dignity of human labour. He believed that God created man to eat his bread by the sweat of his brow. Bread labour or body labour was the expression that Gandhi used to mean manual labour.
- 7. The Doctrine of Trusteeship:
 Trusteeship provides a means of transforming the present capitalist order of society into an egalitarian one. It gives no quarter to capitalism. However, now India experiences both casino capitalism and crony capitalism
- 8. On the Food Problem: Gandhi was against any sort of food controls. He thought such controls only created artificial scarcity. Once India was begging for food grain, but India tops the world with very large production of foodgrains, fruits, vegetables, milk, egg,meat etc.,
- 9. On Population: Gandhi opposed the method of population control through contraceptives. He was, however, in favour of birth control through Brahmacharya or self-control. He considered self-control as a sovereign remedy to the problem of over-population.
- 10. On Prohibition: Gandhi advocated cent per cent prohibition. He regarded the use of liquor as a disease rather than a vice. He felt that it was better for India to be poor than to have thousands of drunkards. But now many states depend on revenue from liquor sales.

7.8.3 Jawaharlal Nehru

Jawaharlal Nehru, one of the chief builders of Modern India, was the first Prime Minister of



Independent India and he was there in that post till his death in 1964. He was a great patriot, thinker and statesman. His views on economics and social problems are found in the innumerable speeches he made and in the books he wrote.

a. Democracy and Secularism

Jawaharlal Nehru was a firm believer in democracy. He believed in free speech civil liberty, adult franchise and the Rule of Law and Parliamentary democracy. Secularism, is another signal contribution of Nehru to India. In our country, there are many religions - Hinduism, Islam, Christianity, Buddhism, Jainism, Zoroastrianism, Sikhism and so on. But there is no domination by religious majority. Secularism means equal respect for all religions.

b. Planning

Jawaharlal Nehru was responsible for the introduction of planning in our country. To Jawaharlal Nehru, the Plan was essentially an integrated approach for development. Initiating the debate on the Second Plan in the Lok Sabha in May 1956, Nehru spoke on the theme of planning. He said, "the essence of planning is to find the best way to utilize all resources of manpower, of money and so on." Planning for Nehru was essentially linked up with industrialization and eventual self-reliance for the country's



economic growth on a self- accelerating growth. Nehru carried through this basic strategy of planned development. Nehru's contribution to the advancement of science, research, technology and industrial development cannot be forgotten. It was during his period, many IITs and Research Institutions were established. He always insited on "scientific temper".

c. Democratic Socialism

Socialism is another contribution of Nehru to India. He put the country on the road towards a socialistic pattern of society. But Nehru's socialism is democratic socialism.

7.8.4 B. R. Ambedkar



B. R. Ambedkar (1891-1956) was a versatile personality. He was the architect of the Indian Constitution, a custodian of social justice and a champion of socialism and state planning. Ambedkar's writings included

"Ancient Indian Commerce" (a thesis submitted to the Columbia University for the award of the Master of Arts Degree in 1915), 'National Dividend of India: A Historical and Analytical Study (a thesis for which he was awarded Ph.D). His thesis was published as 'The Evolution of Provincial Finance in British India: A Study of the Provincial Decentralization of Imperial Finance".

Ambedkar's thesis on "Provincial Decentralization of Imperial Finance in British India" was accepted for the

M.Sc degree in 1921. And his thesis" The Problem of the Rupee" was accepted for the award of the D.Sc degree by the London School of Economics in 1923. It is a miracle that RBI was conceptualized as per the guidelines presented by Ambedkar in his book, "The Problem of the Rupee;Its origin and its solution". The main economic ideas of Ambedkar may be studied under four broad headings:

1. Financial Economics

Much of the work done by Ambedkar during his stay abroad mostly during the period 1913-1923, was in the field of Finance Economics. Ambedkar divided the evolution of provisional finance into three stages: (i). Budget by Assignment (1871-72 to 1876-77); (ii) Budget by Assigned Revenue (1877-78 to 1881-82); and (iii) Budget by Shared Revenues (1882-83 to 1920-1921).

2. Agricultural Economics

In 1918, Ambedkar published a paper "Small Holding in India and their Remedies". Citing Adam Smith's 'Wealth of Nations', he made a fine distinction between "Consolidation of Holdings" and "Enlargement of Holdings".

3. Economics of Caste

Ambedkar believed that caste was an obstacle to social mobility. It resulted in social stratification. He was of the firm view that individuals must be free to change their occupations. Moreover, the caste system caused social tensions. The caste system has resulted in the absence of social democracy in India as distinct from political democracy.

4. Economics of Socialism

Ambedkar was a socialist. He was a champion of state socialism. He advocated the nationalization of all key industries and suggested state ownership of land and collective farming. He was for state monopoly of insurance business. Not only that, he advocated compulsory insurance for every citizen.

There is no doubt that Ambedkar was a great economist. But his academic work as an economist was eclipsed by his greater contributions in the field of law and politics. Above all he was a great social reformer.

7.8.5 J. C. Kumarappa



Joseph Chelladurai Kumarappa was born on 4 January 1892 in Tanjavur, Tamil Nadu. A pioneer of

rural economic development theories, Kumarappa is credited for developing economic theories based on Gandhism – a school of economic thought he coined "Gandhian Economics".

Gandhian Economics

J.C.Kumarappa strongly supported Gandhi's notion of village industries and promoted Village Industries Associations. Kumarappa worked to combine Christian and Gandhian values of "trusteeship", non-violence and a focus on human dignity and development in place of materialism as the basis of his economic theories. While rejecting socialism's emphasis on class war and force in implementation, he also rejected the emphasis on material

development, competition and efficiency in free-market economies. Gandhi and Kumarappa envisioned an economy focused on satisfying human needs and challenges while rooting out socio-economic conflict, unemployment, poverty and deprivation.

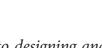
Kumarappa worked as a Professor of economics at the Gujarat Vidyapith in Ahmedabad, while serving as the editor of *Young India* during the Salt Satyagraha. He founded the All India Village Industries Association in 1935; and was imprisoned for more than a year during the Quit India movement. He wrote during his imprisonment, *Economy of Permanence: The Practice and Precepts of Jesus* (1945) and *Christianity: Its Economy and Way of Life* (1945).

Several of Gandhi's followers developed a theory of environmentalism. Kumarappa took the lead in a number of relevant books in the 1930s and 1940s. Historian Ramachandra Guha calls Kumarappa, "The Green Gandhian," portraying him as the founder of modern environmentalism in India.

Kumarappa worked for the Planning Commission of India and the Indian National Congress to develop national policies for agriculture and rural development. He also travelled to China, Eastern Europe and Japan on diplomatic assignments and to study their rural economic systems.

7.8.6 V.K.R.V. Rao

According to P.R. Brahmananda, "the great trinity of pre-independent and post independent Indian economists consisted of D.R.Gadgill, C.N.Vakil and V.K.RV. Rao. These scholars were imbibed with a missionary zeal and analyzed the Indian economic problems with



a view to designing and propagating economic policies/programmes and plans to India's national advantage." V.K.R.V: Rao was a prolific writer.



V.K.R.V: Rao was deeply interested in three large themes. They were:

- i. National Income,
- Food, nutrition and the distribution of good; and
- iii. Employment and occupational distributions.

1. National Income Methodology

As an applied economist, Rao's name is remembered for his pioneering work on the enumeration of national income of India. Rao was a pupil of J.M. Keynes and he worked with Colin Clark. H.W Singer considered V.K.R.V Rao as "the best equipped of all Keynes' pupils. He attempted (i) to develop the national income concepts suited to India and developing countries generally; (ii) to analyze the concepts of investment, saving and the multipliers in an underdeveloped economy; and (iii) to study the compatibility of the national incomes of industrialized and underdeveloped countries. Rao's paper on "Full Employment and Economic Development" was one of the earliest contributions in the field of development towards employment.

2. International Food Aid

Rao was influential in creating ideas and shaping policy in the

international attack on world poverty, not only through his contributions to the question of international aid and improved flows of external resources, but also through his activities in the field of food aid.

3. Support for Socialism

During the early phases of planning in India, Rao supported the case of a socialist India, where the state would control the commanding heights of the economy and the public sector would play a dominant role in economic development.

4. Rao's Views on Industrialization

In his pamphlet "What is wrong with Indian Economic Life?' (1938), Rao gave the following reasons for low per capita income and low levels of per capita nutrition in India.

- i. Uneconomic holdings with subdivisions and fragmentation;
- ii. Low levels of water availability for crops;
- iii. Excess population pressure on agriculture due to the absence of a large industrial sector;
- iv. Absence of capital;
- v. Absence of autonomy in currency policy, and in general in monetary matters encouraging holding of gold.

5. Village Clusters

Rao felt that rural communities had to be given a viable base. Therefore he suggested that a cluster of villages should form a unit for rural development, so that both social and economic interactions between villages could develop, and they could effectively generate and fashion

their own development with a more meaningful participation by people.

6. Investment, Income and Multiplier

Rao's examination of the "interrelation between investment, income and multiplier in an under developed economy" (1952) was his major contribution to macroeconomic theory. As a thinker, teacher, economic adviser and direct policy maker, V.K.R.V. Rao followed the footsteps of his great teacher, John Maynard Keynes.

7. Institution Builder

He founded three national level research institutes namely Delhi School of Economics, Institute of Economic Growth (both at Delhi) and Institute for Social and Economic Change (Bangalore)

7.8.7 Amartya Kumar Sen



The Nobel citation refers to Sen's contributions to social choice theory, development

economics, study on poverty and famines and concept of entitlements and capability development (1998).

1. Poverty and Famines

Sen's Poverty and Famines: An Essay on Entitlement and Deprivation" (1981) is both a theoretical and an applied work. In the book, several famines have been studied in the working of a general theoretical framework from an original angle. He examined various meanings of poverty

and drew attention to the incidence of absolute and relative deprivation.

2. Poverty and Inequality

Sen has carried out massive work on poverty and inequality in India. Sen's major point has been that the distribution of income/ consumption among the persons below the poverty line is to be taken into account.

3. The Concept of Capability

The concept of capabilities developed by Sen has been cited as a better index of wellbeing than commodities or utilities. Capability, as defined by Sen, is the ability to transform Rawlsian primary goods to the achievement of wellbeing.

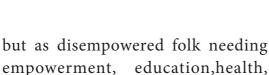
4. Entitlement

Sen has included the concept of entitlement items like nutrition, food, medical and health care, employment, security of food supply in times of famine etc. He considered famine as arising out of the failure of establishing a system of entitlements.

5. Choice of Technique

Sen's 'Choice of Technique ' was a research work where he argued that in a labour surplus economy, generation of employment cannot be increased at the initial stage by the adaptation of capital- intensive technique.

Conclusively, Amartyasen, more than just an economist, is an ethical philosopher. He is a lover of freedom and a humanist. He has focused on the poor, viewing them not as objects of pity requiring charitable hand-outs,



nutrition, gender equality, safety net in times of distress; all are needed to

empower people.

Conclusion

This lesson mainly focused on some of the aspects of the Indian Economy and its resources, infrastructure facilities and energy, It also discussed the principles of Indian Economic thinkers to motivate the students to read good books on Economics Written by the great economists.

Glossary

Economic Growth

Transformation of an economy from a state of under development to a state of development which is measured by Gross Domestic Product (GDP).

Economic Development

An improvement in citizens quality of life and well being of a country which is measured by per capita income along with several other development indicators.

Gross **Domestic Product**

Total monetary value of the goods and services produced by that country over a specific period of time, normally a year.

Indian Economy



Average national income per head of population. It is obtained by dividing the National Income by population size.

Natural Resources

Goods and services provided by the nature. In other words, any stock or reserve that can be drawn from nature.

Renewable Resources

Resources that can be regenerated in a given span of time.

Non-Renewable Resources

Resources that are exhaustive and cannot be regenerated

Deforestation Clearing of forests, trees and thereby forest land is converted to a non-forest use.

Energy Crisis Situation in which energy resources are less than the demand and there is shortage of energy.

Doctrine of **Trusteeship**

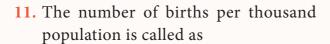
Doners who act as the trustees of their property or business.

[MODEL QUESTIONS]

Part-A Multiple Choice Questions

- 1. The main gold mine region in Karnataka is
 - a. Kolar
 - b. Ramgiri
 - c. Anantpur
 - d. Cochin
- **2.** Economic growth of a country is measured by national income indicated by
 - a. GNP
 - b. GDP
 - c. NNP
- d. Per capita income
- **3.** Which one of the following is a developed nations?
 - a. Mexico
 - b. Ghana
 - c. France
 - d. Sri Lanka
- **4.** The position of Indian Economy among the other strongest economies in the world is ..
 - a. Fourth
 - **b.** Seventh
 - c. Fifth
 - d. Tenth
- **5.** Mixed economy means
 - a. Private sectors and banks
 - **b.** Co-existence of Public and Private sectors
 - c. Public sectors and banks
 - **d.** Public sectors only

- **6.** The weakness of Indian Economy is
 - a. Economic disparities
 - **b.** Mixed economy
 - c. Urbanisation
 - **d.** Adequate employment opportunities
- **7.** A scientific study of the characteristics of population is
 - a. Topography
 - **b.** Demography
 - c. Geography
 - d. Philosophy
- 8. The year 1961is known as
 - a. Year of small divide
 - b. Year of Population Explosion
 - c. Year of Urbanisation
 - d. Year of Great Divide
- **9.** In which year the population of India crossed one billion mark?
 - **a.** 2000
- **b.** 2001
- **c.** 2005
- **d.** 1991
- **10.** The number of deaths per thousand population is called as ...
 - a. Crude Death Rate
 - **b.** Crude Birth Rate
 - c. Crude Infant Rate
 - d. Maternal Mortality Rate



- a. Crude death rate
- **b.** Mortality rate
- c. Morbidity rate
- d. Crude Birth Rate

12. Density of population =

- a. Land area / Total Population
- b. Land area / Employment
- **c.** Total Population / Land area of the region
- d. Total Population / Employment
- **13.** Who introduced the National Development Council in India?
 - a. Ambedkar
 - b. Jawaharlal Nehru
 - c. Radhakrishanan
 - d. V.K.R.V. Rao
- **14.** Who among the following propagated Gandhian Ecomomic thinkings.
 - a. Jawaharlar Nehru
 - b. VKRV Rao
 - c. JC Kumarappa
 - d. A.K.Sen
- **15.** The advocate of democratic socialism was
 - a. Jawaharlal Nehru
 - **b.** P.C. Mahalanobis
 - c. Dr. Rajendra Prasad
 - d. Indira Gandhi

- **16.** Ambedkar the problem studied by in the context of Indian Economy is
 - a. Small land holdings and their remedies
 - **b.** Problem of Indian Currency
 - c. Economics of socialism
 - d. All of them
- **17.** Gandhian Economics is based on the Principle
 - a. Socialistic idea
 - **b.** Ethical foundation
 - c. Gopala Krishna Gokhale
 - d. Dadabhai Naoroji
- 18. V.K.R.V Rao was a student of
 - a. J.M. Keynes
 - **b.** Colin Clark
 - c. Adam smith
 - d. Alfred Marshal
- **19.** Amartya Kumara Sen received the Nobel prize in Economics in the year
 - a. 1998
 - **b.** 2000
 - c. 2008
 - **d.** 2010
- **20.** Thiruvalluvar economic ideas mainly dealt with
 - a. Wealth
 - **b.** Poverty is the curse in the society
 - c. Agriculture
 - d. All of them



1	2	3	4	5	6	7	8	9	10
a	b	С	b	b	a	b	b	b	a
11	12	13	14	15	16	17	18	19	20
d	С	b	С	a	b	b	a	a	d

Part-B Answer the following questions in one or two sentences.

- **21.** Write the meaning of Economic Growth.
- **22.** State any two features of developed economy.
- 23. Write the short note on natural resources.
- **24.** Point out any one feature of Indian Economy.

- **25.** Give the meaning of non-renewable energy.
- **26.** Give a short note on Sen's 'Choice of Technique'.
- **27.** List out the reasons for low per capita income as given by V.K.R.V. Rao.

Part-C Answer the following questions in one paragraph.

- 28. Define Economic Development.
- **29.** State Ambedkar's Economic ideas on agricultural economics.
- **30.** Write a short note on village sarvodhaya.
- **31.** Write the strategy of Jawaharlal Nehru in India's planning.
- **32.** Write the V.K.R.V.Rao's contribution on multiplier concept.
- **33.** Write a short note on Welfare Economics given by Amartya Sen.
- **34.** Explain Social infrastructure.

Part-D Answer the following questions in about a page

- **35.** Explain the strong features of Indian economy
- **36.** Write the importance of mineral resources in India.
- **37.** Bring out Jawharlal Nehru's contribution to the idea of economic development.
- **38.** Write a brief note on the Gandhian economic ideas.

ACTIVITY

1. Visit a village nearby you and find out the number households living without basic facilities

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