

<ul style="list-style-type: none"> ● Introduction 11.1 Migration <ul style="list-style-type: none"> 11.1.1 Meaning of Migration 11.1.2 Types of Migration <ul style="list-style-type: none"> 11.1.2.1 Place-based Classification 11.1.2.2 Reason-based Classification 11.1.3 Causes of Migration <ul style="list-style-type: none"> 11.1.3.1 Economic Causes 11.1.3.2 Social Causes 11.1.3.3 Political Causes 11.1.3.4 Natural Calamities or Environmental Causes 11.1.4 Effects of Migration <ul style="list-style-type: none"> 11.1.4.1 Positive Effects of Migration 11.1.4.2 Negative Effects of Migration 	<ul style="list-style-type: none"> 11.2 Urbanisation <ul style="list-style-type: none"> 11.2.1 Meaning of Urbanisation 11.2.2 Effects of Urbanisation <ul style="list-style-type: none"> 11.2.2.1 Positive Effects of Urbanisation 11.2.2.2 Negative Effects of Urbanisation 11.2.3 Measures to Reduce the Problems of Urbanisation 11.3 Infrastructural Services <ul style="list-style-type: none"> 11.3.1 Education 11.3.2 Health 11.3.3 Electricity 11.3.4 Railways 11.3.5 Petroleum
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Introduction

Major economic changes were brought about in 1991 which are identified as economic reforms. Liberalisation, privatisation and globalisation have changed Indian Economy completely and as a result Indian Economy is being considered as one of the fastest growing economies in the world. Migration and urbanisation are considered as gifts of development process in the country and it is not at all an exaggerated statement.

In the same way, infrastructural facilities are said to be prerequisites for economic development and hence it is directly related to migration and urbanisation. Infrastructural facilities are a combination of facilities which are essential for economic development and economic prosperity of a country.

Thus, in this chapter, we will understand economic development and prosperity and its related aspects like (1) Migration (2) Urbanisation (3) Infrastructural services in detail.

11.1 Migration

The phenomenon of migration became faster with rapid increase in economic growth in which a person has started moving away from his native place and settling in distant places in search of employment, to give stability to his family and to attain a higher standard of living.

11.1.1 Meaning of Migration :

In ordinary language, migration means change in place or moving from one place and settling in another place. But a classical definition of migration is given below.

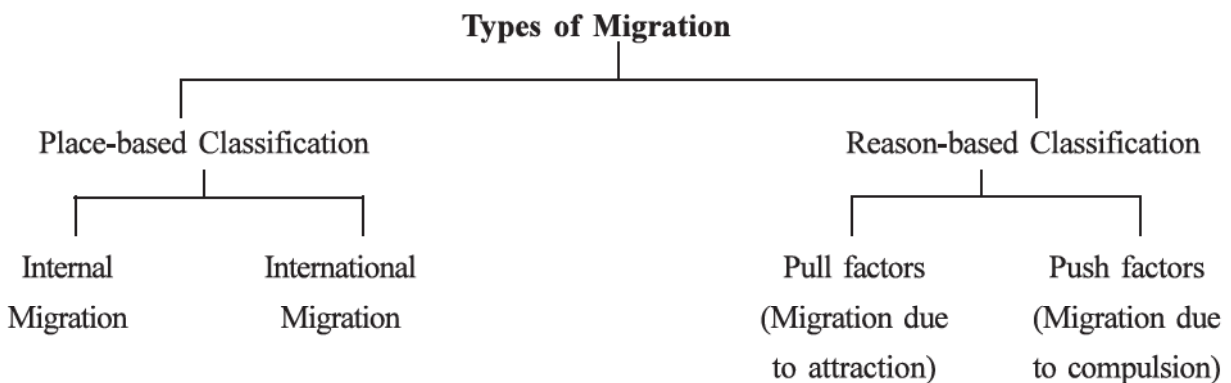
Definition : Migration refers to movement of a person from one place to another place, away from native place either within or outside the country for job, occupation, business or in search of better standard of living, on a permanent basis.

On the basis of the above definition it can be said about migration that

- (1) it is a long term movement within or outside the country.
- (2) it is done for job, occupation, business or for the betterment of living standard.

11.1.2 Types of Migration :

To understand the meaning of migration in detail, let us study the types of migration. On the basis of following information, let us understand the types of migration.



Migration based on place is divided into two : (1) Internal migration (2) International migration

11.1.2.1 Place-based Classification

Any migration which is based on geographical boundaries of a country is divided into (1) Internal migration (2) International migration

(1) Internal Migration : The movement of a person from one place to another within the geographical boundary of a country is known as internal migration. When a person from Gujarat settles in another state or a city or when a person from any other state or city settles in Gujarat then it is known as internal migration.

(2) International Migration : Movement of a person from one country to another is known as international migration. e.g. From Gujarat or from any other part of India, if a person moves to some other country in search of job, occupation, business or for better standard of living for permanent settlement or when people from other countries come to India for settlement on a permanent basis it is known as international migration.

11.1.2.2 Reason-based Classification

There are two types of reasons for migration : (1) Migration due to Pull factors (2) Migration due to Push factors

(1) Migration due to pull factors : When a person gets attracted to the life style and modern infrastructural facilities of urban areas and migrates there, it is known as migration due to pull factors. e.g. the migration from village to a city can be considered as migration due to pull factors because compared to villages, better life style, transportation, communication system, education, health services etc. are available in cities along with wide ranging job opportunities and business prospects.

In the same way, for the same type of attraction in other countries, when people migrate to other countries to settle there permanently, it is also known as migration due to pull factors.

(2) Migration due to Push Factors : When people living in villages are forced to leave their villages due to lack of business or occupational opportunities or when there are limited educational facilities and when they are forcibly pushed to cities, it is known as forcible migration or migration due to push factors.

Thus, after its study reason based migration can be,

(a) In attraction based migration, economically well off villagers move to cities for better life style and the decision is voluntary.

(b) If the migration is based on lack of facilities to improve economic standards or employment opportunities for economically vulnerable groups, it can be called forceful or compulsory migration.

11.1.3 Causes of Migration :

After studying the types of migration, to understand migration in a better way, it becomes necessary to study its causes. We can explain migration under four heads:

11.1.3.1 Economic Causes : The main reason for migration is economic. Economic reasons are :

(I) For Employment, Occupation and Business : When a person moves for employment, occupation and business to another place.

(II) Transfer : When a person is transferred from one place to another distant place, he is forced to move to that place.

(III) Extent of Natural Resources : When a particular place has abundance of natural resources, but relatively the population is low in that area, people migrate to that place. e.g. gold, diamond, metallic mines, petroleum products, mining and refining requires technicians in large numbers. So people migrate to such places leaving their village or native place for this purpose. e.g. Migration to countries like UAE, Australia, New Zealand, Canada etc.

(IV) To Attain Better Quality Education : When educational opportunities are limited in any particular place and a person has hunger for better education, he migrates to distant place which, in due course becomes permanent in nature.

(V) To get Modern Health Services : When a person cannot acquire required health services in his own native, he is forced to migrate to a better place for acquiring those services.

(VI) Planned Migration : When a family plans to send one or more persons away from the native place for performing economic activity to a distant place, it can be called as planned or organised migration.

11.1.3.2 Social Causes : Along with economic factors, social factors also play an important role in migration which are :

(1) Marriage : After marriage when a woman leaves her native and migrates to live in a distant place with her husband it is known as social migration.

(2) To get respite from Social Rituals : A society in a village is traditional and orthodox to a great extent, while urban society has liberal thinking and modern life style. The youth of the villages get attracted to such a lifestyle and like to settle in urban areas to escape from the rigidity and rituals of rural areas.

11.1.3.3 Political Causes : There are two political factors which can be considered for migration :

(I) War and Unrest : In whichever area when war takes place time and again, there will be unrest in that area and people of that place will prefer to migrate to another area where they need not have to live in constant fear and insecurity and can live a peaceful and secured life. So they migrate from disturbed to the peaceful place.

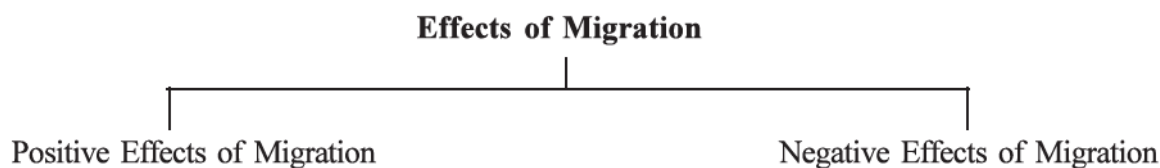
(II) Avoid Friction : Wherever rioting and friction occur people will prefer not to stay there and they will migrate to a peaceful place.

11.1.3.4 Natural Calamities or Environmental Factors : The places which are affected frequently by natural calamities like famine, earth quake, volcanoes, etc. see large scale migration of the people in search of safety.

Due to developmental activity, the migration that takes place, also is included in migration due to environmental reasons. e.g. the migration that happened because of Sardar Sarovar Yojana in Gujarat can be called as developmental migration. Likewise if a National Park or afforestation is adopted, people are made to move to different areas which is also known as developmental migration.

11.1.4 Effects of Migration :

By studying the effects of migration Government can get guidelines for framing migration related policies. From the economic angle when effects of migration is to be studied, we can do this in two ways.



11.1.4.1 Positive Effects of Migration : The positive effects of migration on different sectors of an economy, individual, family, society and the nation is beneficial and developmental. Such effects are the following :

(1) Growth of Income : The main objective of migration is income generation and rise in income. Those who move to cities from villages for livelihood send a major portion of their income to their families which improves the standard of living of those in villages.

Moreover, a share from that income is also invested in agriculture which remarkably improves the production and productivity in agricultural sector.

It has been seen in the recent past that the money earned by them is being invested in business and as a result, agriculture related business and agro industries are also developing.

(2) Contribution towards a Faster Economic Development : When the people of our country migrate to other countries they send a part of their earnings to their families. Also they invest in business, trading and industries which increase the foreign exchange of our country enabling a faster economic growth and economic development of the country. Since the new economic reforms of 1991, migration has rapidly increased resulting into greater inflow of foreign exchange and economic development has been taking place at a faster pace.

Other than that, Indians go abroad for higher education and the expertise that they gain from there is used for the development of our country.

11.1.4.2 Negative Effects of Migration : Alongwith positive effects, there are also negative effects seen from migration. People from villages who migrate to cities are less educated, inefficient and lack expertise and are poor. For such less educated, inefficient people wage levels are low and opportunities in labour intensive areas are limited in cities.

Following are the negative effect of migration :

(1) Unregulated Urbanisation : When less educated inefficient and untrained, village people who are poor migrate to cities, they are forced to live in the periphery of cities due to low incomes and it results in uncontrolled urbanisation.

Moreover, hutments and slums expand as there is no alternative in the cities. So, slums expand uncontrollably.

(2) Shortage of Infrastructural Facilities : An unorganised urbanisation, hutments and dirty slum dwellings make the local administration ineffective as they are unable to provide enough water, drainage, road, transportation, communication, toilets, education, schools, health services, etc. This results in serious health issues as the poor class are affected by serious life threatening diseases.

(3) Problem of Environmental Pollution : As hutments and dirty slum dwellings increase due to which there arises shortage of toilets and drainage facilities alongwith shortage of waste removal system, increasing environmental pollution. These problem become serious issues as a result of migration. The best examples are cities like Ahmedabad, Ankleshwar, Surat, Mumbai, Kolkata, Delhi, etc.

In these above mentioned cities, there are insufficient public transportation which force people to seek alternative transportation resulting in serious problem of air pollution, especially in Ahmedabad.

In the same way noise pollution and water pollution are serious problems.

(4) Social Evils : People who migrate from villages to cities in search of a higher and regular incomes, when not able to get expected job or life style sometimes resort to anti social activities like theft, loot, etc. leading to disturbances in the social life of cities. Social frictions arise among people because of differences in the language, culture, life style etc.

11.2 Urbanisation

Urbanisation is a result of economic development, because, due to economic development, industries and infrastructural facilities improve and expand. This leads to a shift of labour from agricultural sector to industrial and service sectors which makes urbanisation faster.

11.2.1 Meaning of Urbanisation :

Generally, the migration of people from rural areas to urban areas is known as urbanisation.

Urbanisation is that socio-economic process due to which the population in one area increases and gets concentrated which converts into a town or a city. This idea can be said as concentration of population in cities also.

Definition : In 1951 the definition of a town or a city was very broad. But by 1961 the definition became narrow. The following are the criteria that were adopted during the census of 1971, 1981, 1991 and 2001.

(i) All those areas which are planned / managed by Municipality, Corporation, Cantonment Board or Notified Town Area committee.

(ii) All those areas which fulfill the following three criteria :

- (a) 5000 or more population live in that area
- (b) 75 % or more population are employed in non agricultural sectors.
- (c) If the density of population is 400 or more per square kilometer.

Due to industrialisation, urbanisation in the entire world is on the rise, and if this continues, by 2050, 2/3rds of the world population will be in urban areas.

As industrialisation was very slow during the British rule in India, the process of urbanisation was also very slow. But after Independence, the Indian Government has adopted a policy to encourage industrialisation, hence urbanisation has started taking place but at a slower pace. But after the economic reforms of 1991, due to liberalised industrial policy, Government has announced various incentives to industries. The policy to encourage service sector also has resulted in faster economic development and urbanisation.

Generally 3 types of urbanisation takes place :

(1) In towns and cities, birth rate tends to be higher than the death rate and hence the urban population increases at a higher rate which is known as natural population growth.

(2) Due to the change in the definition of village and town areas, many rural areas have been upgraded and merged into cities which result in an increase in urban population. e.g. Ahmedabad, Vadodara, Surat, Rajkot etc.

(3) There is large scale migration of people from rural to urban areas which increases the urban population.

Thus, from the above study, we can conclude that after independence, the process of urbanisation started and since economic reforms 1991, there has been a continuous rise in that process and a clear picture of urbanisation can be got from the statistical representation that follows.

Table 11.1
Trends of urbanisation in India

Year	Percentage of Urban Population
1961	17.97
1971	19.91
1981	23.34
1991	25.32
2001	27.86
2011	31.16

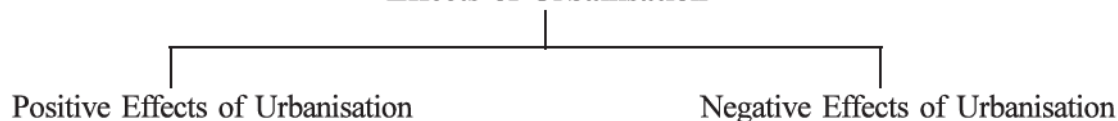
Source : Census of India

On the basis of the study of above statistics it can be said that according to 2011 census 37.7 crores live in urban areas which means 31.16 % (approximately 32 %) people live in urban areas in 2011.

11.2.2 Effects of Urbanisation :

India is only second to China in the process of urbanisation. At present it can be said that urbanisation is taking place at a faster rate which indicates a fast rate of economic development. This has resulted in various effects. These effects can be studied in two parts.

Effects of Urbanisation



11.2.2.1 Positive Effects of Urbanisation : Urbanisation that took place in India has created various welcome effects which can be studied as positive effects.

(1) Increase in Infrastructural Facilities : There is a continuous increase in infrastructural facilities like education, health, banking, transportation, communication, insurance electricity etc creating more employment opportunities which in turn raises the purchasing power of the people to buy goods and services and that necessitates the setting up of more industries, creating more employment opportunities. —→ Increase in employment leads to income rise and rise in purchasing power —→ rise in purchasing power necessitates the setting up of new industries —→ employment increases and this cycle keeps moving on.

(2) Reduction in Poverty : Poverty and unemployment are mutually interdependent. Due to urbanisation, industry and service sector creates large scale employment in cities which reduces poverty. Moreover, rural poor and unemployed who come to urban areas get employment according to their capabilities which also leads to reduction in poverty.

(3) Cultural Development : In cities advanced educational facilities are available and through that, an individual can attain allround development which improves personality of an individual and makes him a cultured individual of the society.

Apart from this, libraries with modern amenities, book stalls and various cultural programmes enrich people culturally.

(4) Ultra Modern Health Services : Due to the process of urbanisation, population in urban areas rise which cater to the various requirements for better health along with education. Today, we can see number of multispeciality hospitals, flourishing in cities like Ahmedabad where, ultra modern treatment is available for every disease in one place.

Moreover, Government and local self Government also start hospitals which directly benefits the poor and the middle class in the society and that influences positively the health and the productivity of the people.

(5) Social Effects - Modern Thinking : The thinking of the people of urban areas is modern because compared to villages, cities have better education, cultural development and modern means of communication. This makes them quickly adapt themselves to the modern world by way of decency and dignity in words, actions, thoughts, life style etc.

(6) High Standard of Living : Urbanisation results in rise in income and the presence of modern infrastructural facilities make the standard of living higher in urban areas as compared to rural areas.

11.2.2.2 Negative Effects of Urbanisation :

Due to uncontrolled urbanisation various negative effects have been seen in India which are as follows :

(1) Income Inequalities : The first negative effect of urbanisation is income inequalities. On the one hand, in urban areas there are intellectuals who are very highly educated, entrepreneurs, business magnates, whose income levels are very high.

While on the other hand, there are poor labourers who are illiterates who do not have any skill or expertise and who do not know anything except physical labour and hence their incomes are very low. Thus income inequalities are very obvious in urban areas.

(2) Social Inequalities : Social inequalities are seen along with economic inequalities. The rich and the educated class have modern thinking while the uneducated poor class have blunt and age-old thinking who get exploited in urban areas.

(3) Problem of Slum-Dwelling : People coming to cities from villages are forced to live in hutments and dirty slums as they are not able to afford pucca house due to their low incomes. They constitute the labour class and their affordability is very low.

(4) Law and Order Problem : Uncontrolled urbanisation has led to population explosion in urban areas which results in serious problems. for e.g. The per capita vehicle in cities is high and is seen to be rising continuously which creates traffic problems.

Moreover, in the absence of employment opportunities and ability to earn enough income, people resort to theft, loot, etc. When such anti social activities take place on such a large scale, the day to day law and order situation proves insufficient and the situation deteriorates.

(5) Question of Infrastructural Facilities : There is shortage of transportation, health, roads, shortage of pure drinking water and such other infrastructural facilities which results in problems of water borne diseases, question of sanitation, shortage of electricity which is because of the failure of the local administrative system.

(6) Problem of Environmental Pollution : As urbanisation is the result of industrialisation, pollution level reaches beyond limits due to different industries. The dirt and squalor also creates further problems. e.g. more than 50 % of poor population suffer from skin and respiratory diseases.

11.2.3 Measures to Reduce the Problems of Urbanisation :

Due to uncontrolled urbanisation, negative effects exceed the positive effects and before it attains dangerous proportions, it needs to be controlled so that the negative effects reduce and the fruits of urbanisation can be made to reach the poorest of the poor class.

We can describe the measures to reduce the problems of urbanisation in the following ways :

(1) Policy Related Steps : Let us analyze the measures taken by the Government of India to reduce the problems of urbanisation.

(a) Control has been imposed on setting up industries in those cities where the population is greater than 10 lakh so that a limit can be imposed on the uncontrolled urbanisation.

(b) Encouragement should be given to development of small sized towns, so that big cities can be restricted from further urbanisation.

(c) The Indian Government has adopted such a policy so that big cities do not become bigger and small and medium sized towns in all the states can develop.

(d) Indian Government has adopted a policy of developing satellite towns near big cities.

(2) Increasing Employment Opportunities : Government has implemented employment oriented programmes to enhance self employment opportunities in cities to ease the negative effects of urbanisation. The aim is to increase the spread of these programmes so that the urban poor can benefit through these programmes and their incomes can rise and there can be improvement in their standard of living.

(3) Strengthen the Infrastructural Facilities : To ensure that the infrastructural facilities like water, road, transportation, communication system, drainage, sanitation etc. reach people at the grass root level, the system should be made strong. The Central Government has implemented the plan to develop smart city, too.

Besides, attempts must be made to construct houses for slum dwellers. Government of India has already started making attempts in this direction by creating proper housing facilities for the poor.

(4) Education and Health Facilities : The rich and the well-to-do class in the cities are able to attain advanced education and health facilities quite easily but the poor class are unable to get enough and qualitative access to such services which creates problem in reducing the negative effects of urbanisation.

If these facilities are made accessible to poorest of the poor, the negative effects of urbanisation can be minimized and the fruits of positive effects can be enabled to reach the poor.

(5) Development of Cottage and Small Scale Industries : Along with the large scale industries, the subsidiary industries, cottage and small scale industries should be increasingly developed so that economic inequalities can be reduced and socio-economic inequalities due to urbanisation can be reduced.

(6) Development of basic Infrastructural Facilities in Rural Areas : The facilities like education, transportation, communication, roads, electricity, irrigation, etc. should be improved so that people will not be forced to migrate to urban areas and this reduces the burden on cities and the negative effects of urbanisation can be kept under control.

(7) Strengthen the Administrative System : Earlier, we have seen the negative effects of urbanisation and how that has created law and order problem. If law and order situation has to be improved, the administrative system should be strengthened and what ever deficiency in administrative co-ordination is seen, should be eliminated and good governance should be brought about to ease the problems. To improve the law and order situation, more and more awareness should be brought about, amongst the citizens.

11.3 Infrastructural Services

The foundation of a nation's prosperity is agricultural and industrial development which is not possible without infrastructural services. Thus, it can be said that infrastructural development is a prerequisite for agricultural and industrial development as it acts as an engine of economic development. Let's study the various types of infrastructural services.

11.3.1 Education :

(1) Education : meaning and its importance : Education refers to the process of teaching and learning.

Human capital formation refers to that capital investment through which physical and mental capabilities of human beings are developed. Thus, investment made for education; training, grooming, research, etc. are known as human capital investment.

Prof. Marshall writes with reference to capital investment on humans as follows. "Every generation inherits values from their ancestors which is the true inheritance. If the physical wealth of the world, gets destroyed but if the ideas to create physical wealth is not destroyed, we can retrieve the resources quickly but if the ideas themselves are destroyed the physical wealth will remain unutilised and with time such resources will be lost and the world will be at the doorstep of poverty."

In this situation education, training, research, technology, knowledge, standard of expertise etc. influence level of development. Thus, education can be considered as the most important factor affecting economic development.

Through education,

(1) an individual acquires more knowledge due to which she/he becomes eligible for high class opportunities and as a result his/her standard of living improves.

(2) Education improves a person's ability to exchange ideas and uplifts her/his self confidence.

(3) An individual can take profitable decisions for himself and due to which he can build a congenial atmosphere for leading a good life.

(4) Education makes a person efficient enough, to utilize the opportunities that are generated in the society through development.

(5) Productivity of factory labourers can be increased.

(6) Technological knowledge can be given through information regarding financial facilities which are available, different methods of production can be made to be used and agricultural productivity can be increased.

(7) Through effective education, a person's active participation in social issues can be increased.

(8) It is essential to increase and expand education to make a person understand the environmental hazards and to enable a society to create environmental balance and maintain the fertility of soil.

(9) Through education awareness can be brought regarding cleanliness and health.

Thus, after observing the development of advanced countries, it can be said that, through education, efficient labour can be created who can contribute substantially to economic development of the country.

(2) Present Scenario of Education : Education facility is provided by the Government as well as private sector in our country. In India, education is classified into stages, based on the age of the child :

- (1) Primary education - 1 to 5 standards
- (2) Upper Primary education - 6 to 8 standards
- (3) Secondary education - 9 & 10 standards
- (4) Higher Secondary education - 11 & 12 standards
- (5) College or higher education - 12 +
- (6) After 8 + standard ITI study can be taken up and technical expertise can be achieved.

The constitution of India has made primary education for children between 6 - 14 yrs age group, free and compulsory and its responsibility is assigned to the State Governments.

During the era of planning right from the Kindergarten level to the various higher education institutes, development and expansion has taken place.

In 2013-14, there were 1.4 million primary schools where 7.7 million teachers were there in India.

Gujarat state has taken initiatives in the form of 'Gunotsav' and 'Praveshotsav' and enrolled more students in the schools. In 2013-14, the registered number of children in primary education were 93 %. Education to all programme (Sarva Shiksha Abhiyan) and RTE (Right to Education), are means to spread education to all.

Due to poverty and illiteracy, the education sector has not developed to the desired extent. Even today, the situation of primary education in small villages is a matter of great concern. 29 % of the children drop out of school before completing their 5th standard.

Moreover, even today, there is a shortage of trained teachers. In 2013-14, the student teacher ratio was 46 : 1 and in upper primary education it was 34 : 1.

In 2013-14, 69 % pupils were enrolled in secondary standards while in higher education it was 25 %.

Table 11.2
Extent of literacy

Year	Extent of literacy in India (percent)	Extent of literacy in Gujarat (percent)
1981	43.57	44.92
1991	52.21	61.29
2001	64.83	69.14
2011	74.04	79.31

Source : Census of India

11.3.2 Health :

(1) Meaning and Importance of Health : The WHO – World Health Organisation has given the definition of health in this way.

Definition : Health is just not absence of diseases or physical strength but it is an individual's physical, mental and social well being.

The productivity of a labour is dependent on his health. Sound mind can be in a sound body. Education nurtures the mind while health nurtures the body.

National Income is directly dependent on the public health of the country.

If the health of the labour is not good and if he falls ill again and again it adversely affects production and productivity. If the health of the labour improves, automatically there will be growth in production. Improvement in health leads to increase in economic growth in three ways.

(1) Rise in productivity leads to rise in output.

(2) Natural resources can be better utilized and wastage of resources can be stopped.

(3) Rise in incomes of labour, leads to higher standards of living.

There are two aspects necessary for good health : (1) balanced diet (2) good medical treatment.

The average life expectancy of the people in a country is an important indicator of people's health. In 1951, the life expectancy of an average Indian was 32 years which rose to 63.5 years in 2011 is due to development of balanced diet, nutritional food and good treatment. Similarly, the infant mortality rate was 146 in 1951 which fell to 44 in 2012.

(2) Health Situation : Even today 70 % of India's total population live in villages but out of the total number of hospitals, only 1/5th are situated in rural areas and thus required medical services are not available in rural areas. There is a vast difference between the medical services in rural and urban areas.

There is a shortage of specialised treatments in rural areas as specialists are not available like Child specialist (Paediatricist), specialist for women (Gynaecologists) anaesthetist, eye specialist (Ophthalmologist) like M.D., M.S and such highly qualified doctors. Good treatment and timely treatment is not available for them.

A healthy child cannot be born to an unhealthy mother. In India due to lack of nutritional food, 50% of females between the age of 15 and 49 suffer from iron deficiency creates anaemia, out of whom 19 % die.

This problem can be eliminated by the spread of education, expansion and spread of health services. The World Bank Report shows that, India spends 4.4 % on health, out of the gross domestic product, while America spends 20.3 % and China 12.5 %.

Government is consistently increasing the expenditure on health. There is a direct relationship between health and country's economic development and thus government can build a healthy nation by expanding and extending health services to rural areas.

11.3.3 Electricity :

Electricity can be considered as an important growth engine for economic development. Infact it can act as a growth engine for the development of rural and urban areas.

Thanks to electricity, the growth of Agriculture, Irrigation, Cottage and small scale industries has taken place in rural areas.

In the same way in cities also, electricity is very important in industrial development and service sector development. In India in 1950-51, the production capacity of electricity was 2300 mega watts which increased to 1,54,574 MW in July 2009.

Thus within the span of 61 years from 1950-51 to 2011-12, electricity production has increased multiple times. The fruits of this increase is directly seen in the development of agriculture, industry and service sector.

India leads the world in electricity production and consumption. India is in the 7th position in electricity production and 5th in electricity consumption in the world.

There are 4 ways of generation of electricity in India :

- (1) Thermal power - through coal
- (2) Hydro electric power - through water
- (3) Nuclear power - through nuclear energy
- (4) Others - windmill, biogas, solar energy etc.

Apart from this the Government is consistently making efforts to make solar power more useful and people-friendly, by giving subsidies for the purchase of solar cooker, solar geyser. It also encourages the use of solar panel.

Out of the total energy produced in 2012-2013, 70 % was hydro electric power, 16 % from wind power, 2 % from nuclear power and 12 % from other sources.

The Indian Government has been giving more and more encouragement for hydro electric power and wind power (windmill) because there is no spread of pollution from both these sources. There is a faster progress in production due to above mentioned two sources.

The use of electricity is predominantly seen in (1) Agriculture (2) Industries (3) Household (4) Transportation (5) others, which is explained through following table.

Table 11.3
Use of Electricity by different sectors (in percentage)

Sectors	Year : 2012-13
(1) Household	22
(2) Agriculture	18
(3) Industries	45
(4) Transportation	02
(5) Other pilferage during transmission	13
Total	100

The production of electricity in India is done by (1) Central Government (2) State Government (3) Private sector

Challenges Faced by Electricity Sector :

(1) The biggest and the most important challenge is that it is not able to use the fullest production capacity.

(2) The second challenge is that the availability of electricity is not enough to meet the requirement of the economy which aims to grow at the rate of 7 - 8 %.

(3) The production of electricity is less than the production capacity.

(4) Apart from these, improper electricity distribution, wastage of electricity, theft of electricity also are important challenges.

(5) Electricity production is also affected by factors like high cost, frequent power cuts, scarcity of coal etc.

11.3.4 Railways :

World over railways is considered to be a revolutionary development in the field of transportation. The British Government developed railway in India for their own benefits. Indian Railway was started during British Rule on 16th April 1853 between Bombay and Thane, a distance of 22 miles (approximately 34 kilometers).

After Independence the administration of railways came into the hands of Indian Government and administered through a separate department.

Today, the spread of railway network stands to be number one in Asia, and number 4 in the entire world. Railway is India's biggest public enterprise and today more than 14 lakh people have got employment in it.

In 2012, 8200 million passengers travelled and 970 million tonnes were transported by railways.

The development of railway has played an important role in India's economic development because:

(1) Industrialisation and business has become faster because of occupational dynamism which is due to faster movement of heavy machines.

(2) Regional dynamism of labour has improved due to increase in speed, safety and comfort level of travel. This has resulted in increase in labour supply to industries.

(3) Development of railway has resulted in commercialisation of agriculture and it also enables the transportation of fertilizers, tools and other inputs from distant places to agriculture and the agricultural produce is transported to the market.

(4) India's foreign trade has developed through the development of railway.

(5) A new sector has developed which is tourism which is entirely due to the development of railway.

(6) Railway has acted as a link for national unity and integrity.

Thus it can be said that Indian Railway as an infrastructural facility has contributed to the development of agriculture, industry and service sector due to which the entire economy has attained development. Hence in every five year plan encouragement is being given to development of railway and its modernisation and the following aspects were taken care :

- (1) More modernisation is undertaken in every plan to speed up the gauge conversion.
- (2) More facilities are being created to make rail travel safer.
- (3) Modernisation of railway station is also being taken up for providing various facilities.
- (4) Railway compartments are also being modernised to make passengers feel more comfort during their travel.
- (5) More and more electrification of railway is taking place, so that the travel can become faster.
- (6) Through modernisation, the work of increasing the speed of the train has already started so that the time taken to reach the destination for passengers and goods can be reduced.
- (7) Talgo and bullet trains are forms of modernisation of trains.

In spite of all these efforts, railway faces number of challenges like :

- (1) The modern technology is still insufficient.
- (2) Facility of railways is still insufficient in relation to its demand.
- (3) Shortage of finance and problems of administration.
- (4) Problems of shortage of facilities for travellers.
- (5) Regional imbalance in the development of railways etc.

11.3.5 Petroleum :

Petroleum can be considered as an important source of energy. Moreover, it is a driving force for movement of all vehicles. Any modern technology has depends on the petroleum produced for its production. However we are dependent on imports because the production of petroleum is relatively limited in our country

The demand for petroleum is rising greatly because of the speedy industrialisation. Along with that transportation is increasing rapidly and it has resulted in the number of private and public vehicles which increases the demand for petroleum continuously.

In India, oil reserves were found for the first time in Assam. Realising the importance of petroleum for economic development, ONGC (Oil and Natural Gas Commission Limited) was set up in 1959 and later the Government converted it into corporation by intensifying exploration of crude oil.

Through ONGC, it has been found that petroleum resources are present in Kadi, Kalol, Ankleshwar etc. in Gujarat and in Bombay High for off shore drilling platform has been erected. In spite of all these efforts, India's contribution to petroleum production is just 0.4 % of the total. The extent of world production at present and a continuous rise in demand, shows that the petroleum reserves are only enough to meet the demand for limited number of years. Hence, the countries of the world have started thinking seriously in terms of alternative energy sources. In this direction, research programmes are being undertaken. India has also started encouraging research in this direction.

Natural Gas also is considered to be of petroleum origin, which is predominantly used in thermal power stations, cooking gas and as fuel for running vehicles. The total gas production in India is only 0.5 % of the total gas of the world. By using more natural gas it is believed that the environmental pollution can be reduced to remarkable extent. Hence, it should be used increasingly in the production of electricity and for vehicle operation. Use of gas is considered Environment friendly.

Exercise

1. Choose the correct option for the following questions :

- (1) In which year was economic reforms introduced in India ?
 (a) 1990 (b) 1991 (c) 1999 (d) 2008
- (2) Identify the type of effect that is caused by migration due to pull factors.
 (a) Negative (b) Positive (c) Zero (d) Relative
- (3) By 2050, how much of the world population will be in cities ?
 (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{2}{3}$ (d) $\frac{3}{4}$
- (4) In which year, the definition of an urban area was liberally given ?
 (a) in 1991 (b) in 1981 (c) in 1971 (d) in 1951
- (5) Approximately, what was the percentage of population living in cities in 2011 ?
 (a) 20 % (b) 32 % (c) 35 % (d) 25 %
- (6) Which age group of children are eligible for compulsory and free education according to the Indian Constitution.
 (a) 4-14 yrs (b) 5-15 yrs (c) 6-14 yrs (d) 7-15 years.
- (7) What was the extent of literacy in India in 2011 ?
 (a) 50 % (b) 60 % (c) 70 % (d) 74.04 %
- (8) When was railway started for the first time in India ?
 (a) in 1953 (b) in 1853 (c) in 1975 (d) in 1901
- (9) In which year was ONGC set up ?
 (a) in 1947 (b) in 1951 (c) in 1955 (d) in 1959

2. Answer the following questions in one line :

- (1) What is meant by internal migration ?
- (2) What is meant by development based migration.
- (3) What is meant by urbanisation ?
- (4) What are the ways through which electricity can be produced.
- (5) Give the full form of ONGC.

3. Answer the following questions in brief :

- (1) Give the meaning of migration.
- (2) What are the pull factors for migration ?
- (3) Give meaning of urbanisation.
- (4) State the different ways in which urbanisation takes place.
- (5) State point wise, the negative effects of urbanisation.

4. Give answers to the point for the following questions :

- (1) Explain the types of migration.

- (2) Explain in brief, the measures to reduce the problems of urbanisation.
- (3) Write short note : Petroleum
- (4) State the importance of education.
- (5) Write short note on the development of Indian railway.

5. Answer the following questions in detail :

- (1) Explain the causes of migration.
- (2) Discuss the positive effects of migration.
- (3) Discuss the negative effects of migration.
- (4) Explain the effects of urbanisation.
- (5) Explain in detail, about India's educational scenario.

Glossary

Migration	: Migration refers to a movement of a person from one place to the other, away from native place, within the country or outside, for job, business, livelihood or for better standard of living on a permanent basis.
Pull factors of Migration	: When a person gets attracted towards the urban life style and various other facilities and migrates to some place from his native, it is known as migration due to attraction.
Forcible migration Due to Push factors	: When people living in village do not get opportunities of job, occupation and business, or if it is not enough, if enough educational opportunities are not available, he is forced to move from his native to cities it is known a migration due to push factors.
Urbanisation	: The gradual increase in the proportion of people living in urban areas from rural and the ways in which each society adapts to the change.
Education	: The activity of teaching or learning is education.
Investment in Human Capital	: Investment in Human capital refers to the money invested or spent on education, health and training to develop a person's physical and mental abilities.
Health	: Just absence of diseases and physical strength is not the real health. But overall well being by way of complete physical, psychological and social health is known as health.

